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POLITICAL

DENMARK/GREENLAND

PEACE GROUP LEADERS DESCRIBE GOALS: CONTROL BASES, JOIN 'ZONE'

Copenhagen LAND OG FOLK in Danish 21-22 Jun 86 p 10

[Op Ed article by Tittus Gronvold and Baltser Andersen, activists in Greenland's peace movement Sorsunnata: "A Greenland Peace Snowball"]

[Text] When you make a hard little snowball and let it roll down a hill or a mountain, you will get a sphere which grows larger and larger. The conditions for that happening are that there is enough snow of the right kind under the ball where it starts and where it rolls.

Sorsunnata formed such a snowball on 1 May 1983, and we set it in motion at Sorsunnata's first national congress on 20 and 21 July 1984. That was over the question of Kalaallit Nunaats (Greenland's) right to be a nuclear-free zone in peacetime, crisis and war. We knew in advance that the Inuit [Eskimo] Union (ICC) would support our demand since it was a part of the demilitarization of the entire Arctic, which ICC stands for, and we knew that the leftwing party Inuit Ataqatigiit [pan-Eskimo party] supported Sorsunnata's viewpoint about our country's right to freedom from nuclear weapons.

In the fall of 1984 the Siumut Party [socialist, radical home-rule party] declared unanimously at its national congress for Greenland to be a nuclear weapon-free zone. Sorsunnata could now be certain of approval of our first demand, and we therefore sent out a press release in which we requested all three Landsting parties to support the nuclear weapon-free demand. And that happened.

Then Henriette Rasmussen from IA [Inuit Ataqatigiit] presented her final proposal to the Landsting on 14 November 1984, which was supported by the entire Landsting, and thereby our Landsting became the first parliament in the Nordic countries in which all the parties represented (Atassut, Siumut and Inuit Ataqatigiit) declared unanimously in favor of a nuclear weapon-free zone in peacetime, crisis and war.

But if we are to derive pleasure from this approval it is necessary for us to get backing from the other Nordic countries, and we must especially emphasize that both we and the Faroes need majority support from Denmark, from the Danish Folketing.

There are two related concerns which are very important:

- (1) Greenland's entry as an equal in a Nordic nuclear weapon-free zone.
- (2) Establishment of a Greenland Control Authority which can guarantee us supervision and control of foreign military installations in Greenland.

Now in Peace Year 1986 we have formed the next snowball and we are starting it rolling by sending out a proposal for "World Peace Appeal 1986." In this appeal we desire support in advance for the World Peace Conference in October such that we will be able to present the Greenland initiative with the greatest possible backing, because such an appeal can be approved and strengthen a new and stronger round in the international struggle for peace, disarmament and the environment.

All peoples must contribute to guarantee peace, and here we find reason to advise the European peace movements against using force in internal disunity and conflict.

Such action is not constructive with a view to peace, and domestic rivalry and the urge to find disagreement instead of unity will damage the common struggle seriously.

We will therefore request all participants in the World Peace Congress that all viewpoints that work for peace, disarmament and a mutual dialogue can be represented in a reasonable way, both peace movements, which are called "aimed East" and "aimed West" and the independent peace movements such as Sunnata.

Peace Year 1986 presents some special possibilities for the peace struggle, and these possibilities will be fully utilized. Therefore all questions of conflict and disagreement must be pushed aside. That involves using the UN international peace year as a lasting lift for the forces of peace and life, and therefore all peace and environmental organizations from as many countries as possible should participate.

In that connection it is up to the arrangers to make the necessary preparations, including quarters and (especially) interpreters.

As for Sorsunnata, we will strongly urge all peace and environmental organizations to cooperate and to unite their forces behind a minimum line so that it will be possible to launch a new and stronger round for the total, global struggle for peace. Therefore we ask for support for our appeal, which is a proposal which should bring together all fighters for peace on the fundamentals in the existing situation.

It is our hope and our conviction that an assembling is now realistic around a united minimum program, under a declaration such as "World Peace Appeal 1986."

Let us walk together, let us go forward strengthened, let the snowball roll...

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POLITICAL PORTUGAL

CAVACO SILVA'S CABINET: TEAM PROFILED

Lisbon EXPRESSO in Portuguese 7 Jun 86 pp 21R-25R

[Article by Jose Manuel Fernandes and Teresa de Sousa]

[Text] Alvaro Barreto: A Symbol of Inefficiency

Alvaro Barreto and Joao de Deus Pinheiro were the two ministers who made the transition from the previous government to this one. As a matter of fact, the former confident of the Mello family has already served in many ministries. He was industry minister first with the Mota Pinto government and later in the Sa Carneiro government. He was in the Ministry for European Integration in the Balsemao government. At the time of the Mario Soares government, he was first given commerce and later agriculture. He has thus headed some of the key areas in successive governments. During this time he tried to expand the image of an efficient administrator.

In the meantime, the years have gone by and there will be little to mark any distinguished act among all that he has done.

In an interview Alvaro Barreto granted EXPRESSO in 1983, he confessed to "entering and leaving government service and the problems always being the same." Three years later, he has become a symbol of government inefficiency.

He is another weak link in the Cavaco Silva government. He was called upon to become a member of this government only after the PSD leader received negative responses from others. Alvaro Barreto has not been able to overcome the status of being a second choice minister.

In addition, his bad television presentation at the very beginning of the government's term (when he had to explain the price increases) did not help him to improve his image in any way.

Finally, people seem to confuse Alvaro Barreto with the greyish obscurity of the machinery: a creaking corrupt machinery that is said to be the cause (with reason) of the many ills afflicting Portuguese agriculture. One of his secretaries of state is a former director general, i.e. he represents the system itself. Furthermore, the publicly known signs of corruption elicited a late response and lead us to ask a basic question: Is the work climate favoring this type of situation to arise?

The minister was also involved in the agrarian reform law's controversial revision. However, such a revision does not seem to be a priority. Meanwhile, not all is well in the much more important European front. There are problems in the agriculture negotiations, which require the greatest attention, and what occurred with the Spanish tuna boats is perhaps one of the most flagrant examples of the mistakes being made.

Arantes e Oliveira: The Quiet Revolution

When the shape of this government became known, there were questions raised about the State Secretariat for Scientific Research. Arantes e Oliveira, the reactor of the University of Lisbon, was given leadership over research, a sector that only had one established department. This was the National Scientific and Technological Research Board (JNICT).

Thus, would it not be tempting for the secretary of state to impose himself on the board? Was this danger not that much more real since the board had been leaderless since the death of Prof Mendes Mourao, the man who had been its soul?

If there was ever such a risk, it no longer exists. The JNICT has also entered a new phase in its existence. Arantes e Oliveira was able to attract one of the most brilliant researchers of the younger generation to head the board. He is Prof Mariano Gago, a man of great international experience. Despite his age (he is only 38 years old), he reached the top of his university career long ago.

Meanwhile, the money allocated to the JNICT has shown a tenfold increase and indications are that it will jump again in 1987.

Modest, seemingly unimportant and without vanity, Arantes e Oliveira has become what can be described as "the silent revolution." This revolution has the Ministry of Planning and Territorial Administration as its stage.

Eurico de Melo: Good Sense of Controversy

Minister of State and Domestic Administration Eurico de Melo could not be more suitable for the low profile policies his department follows.

Their slogan is "the less said about us the better" because the matters of domestic security that fall under his jurisdiction are apparently too sensitive. The head of the Domestic Administration Ministry is suited perfectly for the good sense role he is credited with playing in the Cavaco Silva cabinet.

In other matters, such as the complex judicial and political questions of security, relationships with the police and military forces as well as the security forces, or even obtaining a consensus on the upcoming changes in the electoral laws, he has the young and promising Secretary of State Durao Barroso...

Minister Eurico de Melo was forced to make exceptions to the rule of keeping out of the public eye. He became front page news (in a rather incongruous way) when the public prosecutor's office revealed a large number of abuses committed by the PSP against ordinary citizens. The controversial policemen's union question, which he inherited from the previous government, it is under control. Some government sources complain that no parliamentary party has the courage to take it on. Instead of making political points, he has, for example, presented a bill in favor of it.

He will shortly go before Parliament to present the new internal security bill that was also drawn from the previous government's controversial proposal.

Finally, the government considers that, along with foreign affairs and national defense, this ministry's area of responsibility requires the widest possible level of consensus. As a result, it will be correct to judge future parliamentary performances by other ministers and determine whether or not this minister has good sense.

As of now, Eurico de Melo's ministry is basically busy reorganizing and redefining the different services areas of responsibility. He is looking into the Alien Service, the National Civil Defense Service and others as well as drawing up a tough immigration policy and attempting to improve the Superior Police Academy.

Fernando Couto Santos: Surprise in the Youth Movement

It was with a rather annoying smile that the State Secretariat for Youth was created. It became even more annoying when the new body was put directly under the prime minister. In the final analysis, what did Cavaco Silva care about the kids?

Step by step, however, Fernando Couto dos Santos was establishing his department and consolidating his political position. He achieved this with half a dozen initiatives for which, despite the lack of means at his disposal, he was able to obtain money and strong support.

His best known program is possibly the one that reestablished the Leisure Time Activities Program (OTL) for young people. This summer OTL should involve 35,000 youths (100,000 applied). In addition to this program, there will be a pilot program of "open schools" for the children of emigrants. A project that promotes youth employment will be in effect until December. This program will try to go further than OTL. There will also be a sports vacations program which is a collaborative effort between the state secretariat and the General Sports Directorate (DGD).

Support systems have also been created for young people who create their own job and for a young entrepreneur program. A youth card is being issued in conjunction with France and it will allow its holders to obtain discounts in numerous services and firms.

In addition to this, the State Secretariat for Youth has been involved in such areas as the reduction in the length of military service, the creation of a special line of credit for home buyers, the creation of tax breaks for firms that employ young people and the reorganization and expansion of INFORJOVEM.

However, Couto dos Santos is even more enthusiastic about the new Youth Advisory Council. In this council, for the first time in Portugal, the UGT and the CGTP voluntarily accepted to work together and the PCP did not hesitate to sit at the same table with other political parties.

This young Quimigal engineer, whose experience until now had been with union disputes, is finding that his first experience in government may not catch anyone's eye to a great extent but it is revealing. Couto dos Santos worked with two other members of this government (Mira Amaral, minister of labor, and Carlos Pimenta, secretary of state for the environment) while he worked for the union.

Fernando Nogueira: On the Fast Track

Almost no one notices him in the old Sao Bento Palace where the Assembly of the Republic holds daily sessions. Nevertheless, Fernando Nogueira is the minister for parliamentary affairs in a minority government and he is on Cavaco Silva's fast track both at the party and government levels.

He is 35 years old. He was never elected deputy. He is a moderate by temperament who is an assistant to the prime minister and the head of the complex and sensitive media department. He is also the cabinet's spokesman.

He is calmly looking at the upcoming parliamentary battles, especially the so called labor package scheduled for the end of this month. Political observers generally believe that this piece of legislation is a particularly important test for the government and the opposition parties. His calmness seems to come from his conviction that a wide consensus already exists on these matters that they will become law.

In Cavaco's guerrilla war with parliament (deemed necessary for a minority government that must always ask for 10 of everything in order to get 5), Fernando Nogueira plays the role of the good guy who is open to talk with all the political parties that claim to be democratic. However, to justify the better relations with the renewalists, he admits that some are more receptive than others.

He has been especially prudent with the media, an area where practically all governments seem to run aground with a clatter. Although Cavaco Silva promised he would take a lofty position in this field, the sale of a majority of the government's newspapers continue to await a more opportune moment and the channel promised to the church by the government is limping along in a parliamentary committee.

In sum, it can be said that it is still early to make a judgement on the role this political minister plays for Cavaco Silva, the supreme chief.

Joao de Deus Pinheiro: Falls Short of Expectations

Education, the largest ministry, became even larger with the inclusion of culture and sports under its jurisdiction. This merger was not peaceful. However, the truth is that we can already see a positive outcome resulting from this change. Sports, which was politicized and personalized during the previous government's term of office, has been running itself as it should: by itself. Culture, which was obviously demoted from its status as a ministry, has almost become this government's personal property. It is for this reason that Joao de Deus Pinheiro does not mind the extra work these departments make for him.

However, the real hard nut he has to crack is still the people at the Education Ministry who also were given new responsibilities. One of these new responsibilities was control over school construction which was taken from the now defunct Secretariat of State for Public works.

Ever since he joined school construction with school materiel, Joao de Deus began to have direct control (for the first time) over the construction and the opening of the schools. The reorganization and a relatively higher budget allowed Joao de Deus Pinheiro to undertake one of the most ambitious school construction programs since 1974 and achieve one of the eternal (and never achieved) goals of all ministers: have all the schools open on 1 October. If he does nothing else while in government, his passage through government service will probably not go unnoticed.

However, when this former president of the University of Minho came to Lisbon from Braga to work for the centrist government, he raised much higher expectations. For this reason, there is a small amount of frustration.

It is true that Joao de Deus Pinheiro did try to bring in a breath of fresh air and he has already replaced more than 10 directors general.

However, one of the most sluggish ministerial machines seems to be at a practical standstill. Many of his plans have been put aside while he awaits the approval of the basic education law. The law is now being debated in the Assembly of the Republic. Even the ministry's needed reorganization and restructuring has been put on hold. Until the law is approved things will stay the same, particularly the 600 different subjects that are part of the secondary education curriculum.

Joao de Deus Pinheiro embraced another dream when the education bill was sent to parliament: reformation of the education system. A commission was formed in January and (in what is unheard of) produced its first report in May. More than 50 work groups are now being formed to study many different documents over the next 2 years. The result of the work done by these work groups should become a law that will improve an education system whose employees

resist change and there are archaic structures on which Veiga Simao's reforms were grafted. Is it now Joao de Deus Pinheiro's reforms that will have a go at it?

"Please, do not call them that, otherwise, they will die immediately," he pleaded.

Leonardo Ribeiro de Almeida: The Empty Portfolio

Defense Minister Leonardo Ribeiro de Almeida has the habit of saying to the parliamentary committee on defense when his lack of knowledge in military matters do not permit him to express himself correctly, "Excuse my Ribatejo plebeianism but..."

The reason behind Cavaco Silva's choice of this former speaker of the Assembly of the Republic as defense minister has been sought since this government was formed. The only just reason is the fact that Leonardo Ribeiro de Almeida is "someone we can describe as respectable and possessing the required good sense."

If we also keep in mind that the Defense Ministry does not exist, that it can be described as "the half dozen rooms it occupies on the seventh floor of the general staff building. It does not yet have an organic law or its own personnel. It should be understood that the idea of a respectable man does not break with a tradition that has been kept since the Council of the Revolution was abolished and the national defense law was passed. This law establishes the subordination of the military to a democratic government.

As for the government's new point of view on defense, it is not unlike the so-called Cavaco line to give priority to the economic-financial side. Cavaco has the daring to cut the armed forces budget based on the logic that there is a need to cut. When he had to replace the secretary of state for defense, Figueiredo Lopes, he chose someone with a finance background to handle the supplementary budget question and other matters concerning what the Portuguese Armed Forces should and must have. He idd not choose someone who is knowledgeable in military strategy matters to complement Leonardo Ribeiro de Almeida's respectability.

With his Ribatejo ways, he has already gone farther than some of his seemingly powerful predecessors. He began by coming to grips with Figueiredo Lopes' ambitions. Lopes was a strong candidate for the defense portfolio but he was accused of "being too close to the military lobby" more than he was to the civilian government. More recently he made a clean sweep of his ministry and of his military advisors. Many of these advisors had been in the same position for many years (some even back to 1973...). They were the real power within an almost non-existent ministry.

On the question of a national defense policy, there is almost complete unanimity. There is none but then it never existed!

Leonor Beleza: Intentions Are Not Enough

As the minister of health says, health expenditures must be rationalized. It is true that much money is spent in Portugal on equipment that is never used. It is also true that doctors enjoy privileges that could appear to be excessive.

It is also true, however, that by cutting these ills at the roots, Leonor Beleza became incompatible with everyone, the doctors, the nurses, the hospital administrators, the pharmacists and the medical schools. As a result, she was forced to back down more than once (once even by the Assembly of the Republic) and not always in the most elegant manner.

Meanwhile, the recent appointment of a secretary of state for her ministry may help cover some of Leonor Beleza's more noticeable faults, e.g. her limited capacity to work and her superficial knowledge of the health field. These may be the reasons for her hasty decisions, for putting the cart in front of the oxen more than oce. Greater care and openness to discussion and better technical advice would certainly have prevented some of her false steps.

Of course, it could be said that Leonor Beleza may have even won the public opinion side of some of the wars she was involved in. The truth is that it will be difficult for her to go ahead with the job of rationalizing the health system if she remains incompatible with doctors and almost all other medical professionals.

Mario Raposo: A Problem Manager

Despite the fact that the new penal code is considered one of the most advanced in Europe and that the penal procedure code (being published) is a good adjunct to this legislation, the justice departments continue to be inoperative, obsolete and above all slow moving.

This minister has made many promises: the building of 42 new courthouses, the creation of 372 new positions in the department and the adoption of a reorganization strategy to eliminate the chaotic state of affairs.

Mario Raposo, however, heads an unimpressive staff that has no imagination or creativity. This ministry has practically limited itself to managing problems with judges (who complain throughout Portugal about the lack of conditions to carry out their duties) in a bureaucratic manner.

Problems with the Judiciary Police (threats of strikes for improved salaries and work conditions) and the prison services (prison conditions are reaching unacceptable levels) have also been a constant concern for the Justice Ministry.

Miguel Cadilhe: A Minister in the Shadows

He is not known to have any problems with his peers or with the prime minister. Since he took over the finance portfolio, interest rates have decreased by 5.5 points and inflation continues to diminish. Instead of being in a hole, the 1986 budget deficit should be smaller than expected and the foreign accounts will be positive. What else can be expected of a finance minister?

Miguel Cadilhe should have gained in popularity as a result of all this. Yet he has not. Why? The answer cannot be found only in the inability to communicate of the successor of Ernani Lopes (who did not have a great public image) or in the misfortunes that have occurred during debate in the Assembly of the Republic.

Miguel Cadilhe is sitting on top of a powder keg of which the favorable state of affairs has momentarily doused the fuse. He has yet to face any of our basic financial problems squarely. The nationalized banking industry (some banks) continues unchanged, the public sector debt is increasingly suffocating the possibility of freeing financial resources for the productive sector, the tax bite (promised to be reduced) is growing, and the state budget remains a patchwork through which no one can see. These are all structural problems that cannot be resolved in 6 months but they are either attacked at the beginning of a government's mandate or they are never resolved.

Mira Amaral: The Worst is Yet to Come

The television announcement is obviously badly done but the surprise is in its message: There is a bureaucracy ready to receive those people who are eligible for rent subsidies. Created in only 3 months by the State Social Security Secretariat, the machinery to pay rent subsidies risks becoming uncommonly efficient. It will have 100 offices and use its own computer system. Five hundred employees had to be trained in providing personalized services.

Experience will now tell us if the machinery is well oiled. However, the Labor Ministry considers the first stage to have been completed.

To Mira Amaral, the young engineer who surprised everyone by being chosen for the Labor Ministry post, this was merely one of the many tasks he put his shoulder to. This is the type of task that keeps him at his 16th floor office at the Praca de Londres more than 12 hours a day 7 days a week. He is one of those ministers who did not come to manage the existing structure. He is going ahead with innovation.

He is as innovative in his speeches as he was in the articles he wrote for the engineers union magazine. One of his first measures as minister was to end one of the most controversial white elephants the state had, the Unemployment Fund Management Office. The job saving subsidies were ended, making Rui Amaral, another social democrat, infamous. The fund was put under the control of Social Security while waiting for the single social tax to go into effect.

At the political level, he has managed to stay out of labor conflicts. After the storm of public transportation strikes, he still has almost as many signed collective agreements to his credit as his predecessor had the previous year. He takes pride in never having to intervene administratively in these conflicts. He also got good marks for the way he weathered the back pay storm. The draft he drew up to deal with the more troublesome situations ended up, after a rather slow and controversial start, by being used by 12,000 workers and (more importantly) it was almost adopted by the opposition in the Assembly of the Republic. In essence, two-thirds of the recently approved law are practically a reaffirmation of the principles and proposals contained in his draft.

The most difficult battle, over labor laws, is next. The package to be approved is the same one (to the last comma) that he inherited from the previous government. He made some minor changes in response to union criticism. As a result, he does not understand the difficulties raised in the Assembly and he insists on getting legislative authorization. "The package's inner balance cannot be violated. In order to end the back pay issue, for example, we must look at the law on dismissals again. To introduce changes, even minor ones, may damage this balance."

It is a decisive test for him and the government. Yet, approval of the labor package has already gone beyond the realm of his ministry. Nevertheless, Mira Amaral is showing by his actions and presentations to the council of ministers (where he pays a great deal of attention to macroeconomic problems) that he is among those who are on their way up in the government.

Oliveira Martins: In the Midst of Controversy

First there was the transportation strike, then the railroad accidents, a new competitive bid was opened for digital exchanges and the rent law went into effect. Yet, in the midst of so many storms, who knows that Oliveira Martins is in charge?

He is part of the government's group of technocrats. He is an engineer who had only been in the Terreiro do Paco at the beginning of the 1970's when he was a secretary of state for transportation and communications (1970-1974). He has conducted his activities with obvious discretion. To someone who has been in the center of so much controversy, this is probably a credit to him.

His Public Works Ministry ironically no longer has jurisdiction over public works. In effect, public works was one of the areas the government changed. It scattered functions, which previously had been part of one of the most powerful government lobbies, to other departments. Oliveira Martins feels that this breakup is part of an "irreversible tendency" and "it has many advantages." "Public works people have come closer to their users," he affirms.

Oliveira Martins has made few changes to that part he kept. He gave the go ahead for speeding up road construction by following the previous government's plans. He was able to obtain large sums of money for the railroad and he is

preparing to announce, before the beginning of summer, that large investments will be made in infrastructure. There is money in the government budget from the European Regional Development Fund. The motto is build, build and at a fast pace.

In the meantime, he is being more cautious in his intervention to telecommunications, a sector he is very familiar with. Oliveira Martins had, in effect, left the CTT-TLP after a personal conflict with the previous government. He advocated greater administrative independence for the post office. The departments he now heads complain of a lack of political direction. Meanwhile, some of the new services, such as tele-conference, the video text, paging services and the mobile phone, have not gotten off the ground. A clarification of the telecommunications market (what should be state run and what can be privately run) is also dragging while we await passage of a new telecommunications law. Oliveira Martins' obsession with the passage of this law is running the risk, as it is doing with other ministers in other fields, of becoming an excuse for a lack of action.

The passage (finally) of the rent law and the lowering of mortgage interest rates allow the minister to take pride in the almost spectacular renewed activity in the housing market. All that needs to be said is that the record for home mortgage loans jumped to 5,000 per month at the Caixa Geral de Depositos [a savings bank] from the 3,000 per month average since 1981.

The ministry's great Achilles' heel, however, is its eternal digital exchange problem. While still an advisor to Cavaco Silva, Oliveira Martins exposed a good deal of the controversy that raised innumerable questions about the previous government. This government's new approach to this deal, a new competitive bid, the Siemens-Centrel problem and the absence of new selection criteria, appears to be as flimsy as the previous approach.

Pires de Miranda: An Undiplomatic Chief

What does a public administrator do at the head of Portugal's diplomatic corps?

One possible answer may be found at the foreign ministry itself. Pires de Miranda is used to handling international oil negotiations at Petrogal, which has a budget one-third the size that of the government. This administrator may be able to imbue the foreign ministry with a more efficient way of doing things and contribute to the creation of a diplomatic style that leans more toward the economic and less toward the moldy old style of representation.

After a few months at the foreign ministry, the greatest proof of Pires de Miranda's efficiency appears to be the deep changes he has been able to make. These changes have had at least two effects. One, proudly claimed by his own staff, was to reduce the ministry's top positions from 125 (proposed by Gama in a reorganization that Eanes did not get to approve) to 86. The second, was "to put all the career diplomats against him." The latter was widely commented in political and diplomatic circles.

Pires de Miranda's basic rule at the foreign ministry is to show that anyone who does not wish to toe the line will suffer the consequences of not doing so. The foreign minister has Cavaco's solid support on this. Paulo Enes, the ambassador to Bonn, ended up returning to Lisbon ("as punishment") to vegetate in the halls of Necessidades Palace after he refused the secretary general's position in the ministry.

In addition, Pires de Miranda is a numbers specialist, which is a good reason for perfectly fitting in the Cavaco Silva cabinet.

What about foreign policy? The people in the foreign ministry admit that "the shock of being in Europe is much greater than anticipated." People must now be on the go constantly and numerous groups have had to be created. In short, it seems to require a response capacity that the foreign ministry does not have, even if the EEC is the top priority of Portuguese foreign policy.

As incredible as it may seem in a government headed by Cavaco Silva and in a ministry headed by a manager, the diplomatic mission in Brussels (the focal point of European and Portuguese policies) is still not operative. Ambassador Leonardo Martins was appointed by this government to replace Ambassador Silva Marques (appointed by the previous government) as the head of the diplomatic mission; yet he has not left Lisbon. Meanwhile, tons of paper fall on the embassy in Brussels and there is no capability there to follow up on all this paperwork.

The difficulties are so great that a high level opposition party leader says, "Cavaco accuse' the former government many times of conceding in the negotiations. He stated many times his intent to renegotiate the accession treaty and now he seems not even to be able to secure previous concessions..."

Ministry personnel admit that other parts of Portuguese foreign policy (NATO, Africa and emigrants) have inevitably been neglected because of the high urgency to integrate with the communities.

The new social democratic administration feels differently about Portugal's relationship with the United States. It accuses the PS, also on this point, of making too many concessions. However, it does not have an alternative policy to offer. For now, it is limiting itself to appointing an old retired ambassador, Jose Manuel Fragoso, to deal exclusively with the compensation America pays for the military facilities granted by Portugal. When Pires de Miranda left for Luxemburg to attend the European Community's twelve member summit concerning the position to take on the American attack on Libya, he merely said that Lisbon would defend the EEC position without saying what position Portugal would propose the communities adopt.

Santos Martins: The Most Controversial

Cavaco Silva does not like to have people speak about replaceable ministers but each time Santos Marins' name comes up it is as though he could be one of those who may, or is going to, fall.

He is under fire and not even his proverbial good disposition has softened a protest that, even if it appears quiet, is being effective.

We knew he would not have an easy task. His predecessor, Veiga Simao, not only left minefields but he was also one of the main players (while president of LNETI) behind a policy he promised would be different.

Where was the change supposed to occur? It was in the subsidy policy, in those subsidies that the former minister prodigiously distributed. Santos Martins wanted to review the criteria for these subsidies and ordered all procedures to be suspended and reexamined. Two months later, faced with pressure from industry and services, he once again loosened the purse strings. The lines of credit available through the IAPMEI were again made available as were those being channeled through the LNETI.

The delay of several months was not productive and it caused some unease among industrialists. These same industrialists (for the sake of truth this must be said) are too used to living on subsidies, credits and other crutches.

Meanwhile, the new investment incentive system, which is extremely important, has yet to be created so that there is no counterpoint to the previous aleatory system. Now, there is talk of a new system that has reportedly gained cabinet approval. It will supposedly be based on regional incentives and the promotion of employment and innovation. The truth is, the months that have elapsed were crucial. Without clarity in the procedures and without dialogue among the parties, the climate of trust that Cavaco Silva speaks of cannot be created easily.

On the other hand, Santos Martins and the Ministry of Industry may have just taken decisive steps toward resolving some of the public sector's chronic problems. An example is facing the reality of the white elephants such as the Sines Area Office or the CNP. The steel problem, which has always been put aside, is an area where decisions have finally been made. The future of the EDP is being seriously looked into. The ministry was criticized for some of these decisions but the truth is that Santos Martins scored points by simply (for better or worse) finally making a decision. The lack of decisions, good or bad, was becoming one of the greatest cancers of public administration.

Teresa Patricio Gouveia: The Role of Charm

In a government that has few women and where it is a rarity to find any sense of public relations, Teresa Patricio Gouveia could not help but stand out.

It was said at first that the elimination of the Ministry of Culture and placing the newly created State Secretariat for Culture under the Ministry of Education was a demotion. In the end, time has shown that culture could benefit from this solution by obtaining, as it did, appropriations that only integration in a large ministry made possible.

Furthermore, the selection of Teresa Patricio Gouveia allowed for a much less stuffy and more modern style and public image than that of Coimbra Martins, the former minister of culture. Her deep knowledge of this sector's machinery also facilitated a more efficient and timely style of management. She has become known for giving a response in a shorter time to the not less than 19 departments at the directorate general level that fall under her area of responsibility.

Finally, the promised and innovative law for the protection of artists, has not been fulfilled yet. This was the touchstone of the government's cultural policy.

Valente de Oliveira: A Quiet Revolution

One of this government's strongest bets was the new Ministry of Planning and Territorial Administration (MPAT). Valente de Oliveira, a true gray eminence, was put at its head.

Months went by and little was heard about the man who came from the Northern Region's Coordinating Committee. However, when we enter the maze of general directorates, committees and offices that were joined for the first time in the original MPAT, we come to the realization that are witnessing a true silent revolution. The ministry's organic law, which was already passed, should sanction many of the changes being made.

For example, the planning system is being greatly changed. In place of the traditional method of having the central government's plans simply reflect the sum of the different sectors' plans, everything now will have to be checked by the Regional Coordinating Committees (CCP's). As a result, regional integration and policy specialization and planning can be achieved. A new statistical system, which is in greater harmony with community norms, is the first step in this process. Integrated management (participative and regionalized), of water resources through the newly created basin administrations, has already been the subject of pilot tests in the north of Portugal.

The creation of the first environment quality control system was made possible because of the increase in the environment's political muscle. Requests for bids to provide the equipment has already been made.

Territorial administration and order, which used to be the object of constant bickering among three rival general directorates (urban planning, territorial order, and regional and urban equipment), will now be under a single integrated general directorate.

The organization of the administration was also almost completely changed. Some general directors and others, who although close to the PSD had compromised their positions earlier particularly with the public works lobby, were dismissed.

Not all these changes were peaceful ones. The truth is, however, that throughout the process Valente de Oliveira has shown the peace of mind and the "savoir faire" of a great gentleman. He is directing resources to his ministry without any great pomp. He is achieving this even in the controversial European Regional Development Fund problem.

In effect, after an agitated controversy and a long behind the scenes battle, the Directorate General for Regional Development and the CCR's will be the big winners of a situation that divided the previous government. The national European Regional Development Fund law has already been approved and all indications are that it satisfies the local governments. As a result, requests for development funds should be calmer and obvious in 1987.

Even so, it was in his relations with the town halls and their representatives that Valente de Oliveira had the most difficulty. Perhaps he did so because he did not understand the power the National Association of Municipalities have to make demands. Distribution of monies to local governments was his only public controversy.

9935/12795 CSO: 3542/120 POLITICAL

PSD CONGRESS: POSSIBLE REDEFINITION OF POLITICAL GOALS

Lisbon EXPRESSO in Portuguese 7 Jun 86 pp 26-27R

[Article by Pedro d'Anunciacao]

[Text] "The man was not at his best today." That candid comment was made by one of those intermediate cadres of the PSD who come from the provinces. Anibal Cavaco Silva had just finished speaking and the 13th Social Democratic Congress had concluded. The delegates were elbowing one another in the corridors of the Coliseu on the way out.

In fact, the taste of victory could be felt. A practically unanimous victory in which even the Islands' strategy motion managed a scant 40 votes. But for a certain segment of the PSD, that was not enough. Thus, the disappointment of that delegate in considering that "the man was not at his best today." A year ago at the end of the Figueira da Foz Congress, the same delegate would certainly have commented enthusiastically: "The man is at his best today."

And the fact is that it was the most forceful speeches of Cavaco Silva in May 1985 that thrust him into the leadership of the PSD, and later into the leadership of the government. The fact is that the intermediate cadres of the PSD especially pride themselves on threatening scowls and overbearing words. They like order and think that is the way it is achieved.

Cavaco did not give them that pleasure. On the contrary, both at the opening and the closing of congress, his speeches were conciliatory, clearly open to the most moderate forces. Even his tone of voice in reading them was purposely soft and drawn out.

Political and Social Concerns

The sense of both speeches was similar. In the first, the Social Democratic leader primarily reviewed his year in power. In the second, he made plans for the future, stressed the social aspects of political activity, and expressed optimism through the words of hope that he used. And Cavaco Silva's aides hastened to laud especially this latter speech. As always happens with the prime minister's speeches, his wife, a Portuguese-language high school teacher, participated in the details of drafting it.

From a political standpoint, it was not a very erudite speech. It confused Hegel and Gramsci's concept of "civil society" (the civil organs of society imposing themselves on those of the state) with those of the antimilitarists. It also had a clear technocratic (or excessively materialistic leaning) in stating: "The old rule of 'politics first' must be transposed in the Portuguese situation to 'economy first.'" And some quasi-Marxist-Leninist vanguardist appeals (asking the PSD to set itself in the front rank of the leadership of the various social and political organs) would even be pared from the text at the last minute at the suggestion of the leader's close advisers.

But it revealed the prime minister's political and social concerns, which come through clearly in this passage, for example: "We will walk together in the hope of a world in which the nuclear threat, the fear of war, the aggression of terrorism, the horrors of the waves of hunger, the flagrant and revolting social injustices—all of the actual or potential scourges that threaten our universe—can be gradually eliminated." Observing that for one who is not a great mystic or great philosopher, happiness requires a reasonable basis of well-being, he even indulged in humor, recalling this anecdote: "Wealth does not bring happiness but it is a more comfortable way of being unhappy."

From Antiliberalism to Keynesianism

As for the prime minister's economic and social philosophy, a member of his team even told us: "Whoever may think that Cavaco is minimally liberal is much mistaken; he is much more in favor of state intervention than, for example, a person like Jaime Gama. And the truth is that, on the basis of the speeches he made at this congress, we can define him as a Keynesian with obvious social concerns.

Something new noted in this speech was the words addressed to the intellectuals. The column by Eduardo Prado Coelho in the last edition of EXPRESSO, regarded as very laudatory to Cavaco Silva, must have particularly moved him—he who had begun by being scorned by almost all of the national intellectual community. Cavaco would be precise in that regard: "Development requires culture and in this regard the PSD evokes the irreplaceable role of the intellectuals in the achievement of that permanent symbiosis, a role the success of which will be assured by their creative power, their disseminating capacity, and their driving genius."

The Opposition and the Alliances

As for the opposition, the Social Democratic leader would prove to be as prudent as his motion with reference to alliances. Tongue-lashing? He did not lash out at anybody, and the only party treated as a political enemy was the PCP. "The strategy we approved at this congress clearly indicates the course of the PSD's effort in the quest for government stability," declared Cavaco Silva, emphasizing immediately afterwards: The PSD considers dialogue to be a basic instrument of political action." But

that is as far as it went; he did not reach the point of agreeing to negotiations to approve measures, regardless of how structural they might be.

The threats forcefully hurled in Campo Pequeno were toned down here. "The PSD declares in advance that it will not participate in another government experiment in the current parliamentary framework with any political force that directly or indirectly promotes the overthrow of the government; in that case, elections must be held and the then current will of the electorate must be determined." Immediately afterwards, he stated: "The possibility of a popular front government of the PCP with the PS and the PRD is implausible and incredible and incapable of generating trust among the economic and social agents."

But he would add: "The PSD has not excluded the development of an in-depth dialogue and a closer relationship with other democratic political forces which, by their practice, show that they are interested in stability and progress." In this aspect, Cavaco Silva did not depart from what was embodied in his motion: he leaves all doors open with an explicit threat for those who want to overthrow him.

Clear Opening for the Eanists

Government sources think the prime minister is preparing to move toward even a preferential understanding with General Ramalho Eanes and his PRD, possibly already at the time of the next state budget, thus forestalling an alliance in the assembly that would more seriously hamper government action. Moreover, in the full congress, Angelo Correia, always sensitive to where the wind is blowing, clearly defended the predictability of an alliance with the PRD and, contrary to what had been the custom in Social Democratic environments, did not generate the slightest anti-Eanist reaction.

Along with his aides, Cavaco has always expressed a very clear preference for an executive comprised of the PSD alone. He even cites an example of his experience in the first AD government to conclude that, because of its greater cohesion, the current formula is much more effective; but he does not discount the possibility, if he is forced into it.

Inclusion but With Limits

Cavaco Silva has sought to give a new internal image to the party. "Everyone has been able to witness that the PSD today is a cohesive but free party. The solidarity among its members is not imposed by assumed; the plurality of opinions transcends any form of singularity; directness overrides any form of subservience."

One month before the congress, Cavaco informed his closest advisers that he intended to try out a proposal of inclusiveness for the National Council, and when the Coliseu proceedings began all invitations had

already been addressed; not only to Mota Amaral and Alberto Joao Jardim, but also to Joao Salgueiro, Miguel Veiga, Henrique Granadeiro, Rui Machete, and Faria de Oliveira.

At the beginning, there was still some hesitation about accepting the invitations. The fact is that the inclusion offered by Cavaco did not include negotiations. And the proposal itself, which advocated the possibility of appealing the decisions of the Jurisdiction Council to the congress (having in view the case of the unionists recently expelled for supporting Mario Soares) and was steadfastly supported by Mota Amaral, would immediately be defeated overwhelmingly.

Cavaco thus continued to prove to be averse to negotiations. He limited himself to offering some seats, in a proportion carefully studied by him. His caution regarding the proportion was such that he even became concerned when he saw the JSD put forward its own proposal of a list of names for the National Council.

The Social Democratic leader knew that all of the opposition, even those who had accepted seats offered by him, would vote for that list. That would mean a rude blow to the proportion of factions laboriously prepared by him. For that reason, he gave strict instructions for the JSD list not to be accepted--even voting personally, holding his card aloft, against the appeal presented to the congress by the Social Democratic youths. It was the first time in the whole history of PSD congresses that the period for the presentation of a list (which had reached the table of officers 8 minutes late) was not extended by consensus. It should be recalled that Cavaco Silva's own candidacy in Figueira da Fox was not presented in time.

Defections of M. Amaral and Jardim

But what would most surprise the delegates to the congress would be the departure of Mota Amaral and Alberto Joao Jardim from the Balsemista group. It was conceded from the beginning that the Islands' leaders would desist from presenting their own list (Mota Amaral, especially, expressed the greatest doubts) but no one imagined that they would go to the point of joining Cavaco's candidacy; the more so since both had their seats in the National Council assured by virtue of their positions.

From the beginning of the congress, it was perceived that the Coliseu hall was overwhelmingly with the leader, Cavaco Silva. By their attitude, Mota Amaral and Jardim avoided arousing unpleasant feelings among the congress participants. The Balsemistas hastened to express their displeasure with that attitude, not voting on the Islands' strategy motion (which did not manage to obtain 50 votes).

Finally, the only ones who refused Cavaco's invitation were Salgueiro, Miguel Veiga, and Henrique Granadeiro. At the press conference he granted after the congress, Cavaco Silva informed the reporters that they had all given "long explanations" for their refusal, as if giving to understand that even they did not have the courage to oppose him head-on.

But the truth is that, as a Social Democratic leader told us, "anyone who would have gone to this congress to oppose Cavaco head-on would have been crushed." The same leader concluded that whoever wanted to save himself for the future should do what Francisco Balsemao and Marcelo Ribeiro de Sousa did: simply not show up. Because after all, as Rebelo de Sousa wrote recently in one of his articles, in his first 9 months of government, Cavaco Silva is very naturally enjoying his peak of popularity. The columnist seemed to foresee that from now on, Cavaco's future will be to decline from the maximum point he has reached.

8711/13252 CSO: 3542/119 SOCIAL

UGT SEEKS ROLE IN SEAT ADMINISTRATION

Madrid MERCADO in Spanish 20 Jun 86 pp 37-38

[Text] Last week, midway between the signing of the INI [National Institute of Industry]-Volkswagen agreement and the holding of the union elections at SEAT [Spanish Passenger Car Company, Inc], the UGT [General Union of Workers] sent a letter to the president of the company, Juan Antonio Dia Alvarez, which contained one very specific demand: "We want to participate in the administrative council of the new SEAT."

Antonio Puerta, secretary of the UGT's Metalworkers Federation, is convinced that this may be a battle--particularly if the union wins it--which will have an impact on negotiations with other big companies. "It isn't just something we want at SEAT," said the leader of the UGT's metalworkers group. "This is part of our union's policy. We want to have the same level of influence in all companies."

The UGT, the CCOO [Workers Commissions] and the INI all know that SEAT is not just an ordinary case. The repercussions of what happens at SEAT will affect all the other companies.

Watchdog Committee

Obviously the INI is very sure about this. "We," said a source from Marques de Salamanca, "are not the majority stockholder. It is Volkswagen that will have to decide if it wants union members to sit on the administrative council or not." As SEAT is no longer a public enterprise, the resolution contained in the AES [Economic and Social Agreement], which permits participation by unions which represent a minimum of 25 percent of the workers—with one representative on the administrative council—does not apply. As of now, the automobile manufacturer is, for all intents and purposes, a private company.

Nor do the UGT people have any illusions about this. They know that the administrative council is now a closed preserve, on which the INI will put men who have followed the negotiations most closely (Javier Alvarez Vara, Jose Manuel Garcia-Hermoso, Javier Salas, and Javier Vega), and Volkswagen is

not going to give up placing its Wolfsburg executives, the foremost of whom is Werner Schmidt, who will become chairman of the council.

But the unions' proposal would be to win something similar to what the German unions now have at Volkswagen: the creation of a watchdog committee as a joint organization with both management and labor participation. "For example," proposed Puerta, "the commission of 12, as a union organization which has been involved with the negotiations with Volkswagen, could form the embryo of this joint committee which would share—based on each union's representation—in the company's management."

Getting Hahn Back to the Table

The "SEAT issue" is certain to continue to cause a lot of talk. Even the very act of signing Volkswagen's takeover of 51 percent in Geneva had its ups and downs. Carl Hahn wanted the agreement to be signed behind closed doors, with no reporters or publicity. Volkswagen had spoken with the SEAT management about making 18 June, the date of the general special meeting, the key date for the agreement. But that was not to be. Reporters were present, and Hahn didn't like that. A previously agreed upon commitment had been broken. Why did Volkswagen's chairman get so upset about the presence of reporters? It would be naive to think this was only the traditional German insistence on respecting agreements. There was something more behind this. Among other things, there still remained to be discussed who would be responsible for the Schmidt payroll for this year, which amounts to 30 million pesetas. INI sources commented: "We couldn't see why, with an agreement involving billions, a meeting would be interrupted over such a trivial amount."

Balanced Books in 1986

Something that seemed unbelievable just a few months ago is going to happen this year: SEAT will close its fiscal year with balanced books. According to all the forecasts, the company's losses this year will be almost insignificant. This miracle will be brought about by two factors: a reduction in financing charges because of the economic improvements made by the INI, which have cut these costs to about 4 percent over sales; and intragroup sales, with the subsequent price transfer.

Hidden liabilities will remain covered by a credit from the INI itself for 20 billion pesetas, which will be in full effect until 1990.

7679

CSO: 3548/65

SOCIAL

CHALANDON EXPLAINS NEW INVESTIGATION, PRISON POLICIES

Paris LE MATIN in French 19 Jun 86 pp 14-15

[Interview with Albin Chalandon, minister of justice, by Ariane Bouissou and Ruth Elkrief; date and place not given]

[Text] In an interview granted to LE MATIN, the minister of justice explained that he wanted above all to be pragmatic. "I do not want to cause any big upheavals," he said. "I only want to tidy up the laws." He defended his reforms point by point. He had nothing against crime prevention, but considered that punishment was necessary. He noted that before his reform, the gap in punishment between theft and violent crime was slight. He was opposed to the reform of preliminary investigations and the penal code. On the political level, he openly criticized the role taken by the president of the Republic whom he considered "the chief of the opposition," and he hoped that Jacques Chirac would become president.

[Question] Immediately on your arrival at the chancellery, you declared that you would not be a man for "great reforms." Three months later, aren't you in the process of turning the judicial machinery upside down?

[Answer] Not at all! I said that I would not be a man for excessive legislative growth. I do not have any ambition, as did my predecessors, to redo the Penal Code, to bring about upheavals or big legislative panoramas. I want to be the minister of the pause. I will try to compare the laws with reality, to see what does not work and to tidy them up. Moreover, within the framework of the laws made by others, by the government, I would like the chancellery to act with a concern for simplification, for clarification. The texts I have proposed, and which can be effective, have a voluntarily pragmatic, limited character. As to the issue of prisons, I will very simply be obliged to go from the current system to a reform of partial privatization.

[Question] You could have considered pardon measures, the development of punishments in place of prison, or again that of judicial control, in order to reduce provisional detentions. Is the call for private capital to construct new prisons the only solution?

[Answer] I don't see any other. About 15,000 to 20,000 additional places are needed. Current programs provide for 2,000 to 3,000. A budgetary outlay would thus be needed out of proportion to all that we can hope for today. As to judicial control, for lack of means, it is ineffective and cannot be envisaged on a large scale. Thus, the margine for maneuver is very narrow, if not to say nonexistent.

[Question] If the state delegates the tasks of surveillance of prisoners to the private sector, what will be its means of control?

[Answer] You already have in France public service tasks that are granted to private firms with requirements set by the state, rules, a professional code of ethics defined by a schedule of conditions. With a possible penalty: the withdrawal of this schedule.

[Question] You asked the state prosecutors to make "firmer closing speeches" and you are launching a drive for prison construction. Aren't we risking an increase in imprisonments?

[Answer] If felonies are involved, the people's jurors of the courts of assizes do what they want. If misdemeanors are involved, I hope that shorter but effectively executed sentences will be pronounced.

[Question] You know of cases of sentences that have not been carried out?

[Answer] You have people who are sentenced to short-term penalties and whom we come to look for at the end of 2 years in order to put them in prison. That makes no sense! The punishment must be effective and executed rapidly. If not, the end is a shrinking of the range of punishments: Between petty theft and violent crime, the gap in punishment is slight.

[Question] Listening to you, we have to some extent the impression that penal policy for you comes down to increased repression. What are your objectives with regard to prevention?

[Answer] For 40 years prevention has been a new category of justice, whose praiseworthy intentions correspond to the French judicial tradition, which is to judge the man as well as the act. Cure and prevention are all very well. But that should not let us forget the other traditional aspect of justice, which is atonement, punishment. With regard to prevention and in the face of massive criminality, the problem goes very, very far beyond what justice can resolve. My experience as an elected representative from the North proves it to me. The police can exercise a preventive action, one of block patrolling with their presence in the field, with identity checks. All this has a dissuasive effect, but the police cannot regulate everything. It is a problem of society, in the face of which mobilization, in the field, of the community as a whole can make things move forward.

[Question] You launched an appeal for the mobilization of 10,000 volunteers. What directives, what means are you giving them?

[Answer] I am going to take a specific example: It is widely known that a band of 60 to 80 hoodlums--miners among them--is sowing panic in Roubaix-Tourcoing, with daily attacks, petty burglaries. The entire sector is poisoned by the presence of these young people whom we must render harmless without for all that putting them in prison. Up to now, nothing has been done. They are picked up and released.

[Question] Where did you get your idea of "youth workshops"?

[Answer] If you want to rehabilitate young people, you must give them a reason for living by interesting them in a project, make them live together and, if possible, make them work by imposing a minimum of discipline on them. I do not deny that in an open environment a young person may be rehabilitated. But most often, with this system, we find more educators than educated, since these young people are on the outside and the return is very slight. Hence, this idea of nature centers, which I will call "centers for vocational and sports education." We should be able, in this framework, to find work of general interest, like the restoration of forests, the reconstruction of an old house, who knows what else, ideas are not lacking! The ideological debate on a closed or open environment is thus a false debate: these centers, in the midst of nature, will not be surrounded by barbed wir. We must leave the taboos, invent new forms.

[Question] With regard to your four "security" bills, their detractors consider that a sufficiently repressive arsenal was already available.

[Answer] We do not have the necessary means, at present, to confront the problems of crime and terrorism. In that case, either we remained powerless or we reacted by a rebalancing of justice between its repressive and its repressive and its social arm.

[Question] With regard to the struggle against terrorism, you have abandoned your proposed definition of a "crime of terrorism" while at the same time planning a set of special measures. Isn't this dangerous for public freedoms?

[Answer] If a single definition had been retained, what would have happened? Terrorism conceals very different realities and there was the risk of confronting inequalities of treatment, contrary to the principle of the Constitution. Besides, this presented a problem with regard to extradition. We therefore preferred an empirical method, retaining a certain number of offenses and adding to them the idea of a deliberate will to attack public peace. This all the more since terrorists publicly claim responsibility for their acts. I think that our project is pragmatic. And it does not, in fact, include any basic innovation. Moreover, all decisions with regard to police custody and searches will be taken in agreement with an independent judge. In total, this project aims at strengthening both our means and legal guarantees.

[Question] You hope to develop "immediate appearances," without preliminary investigation, on the basis of "sufficient charges," in the facts, on a police report. Isn't this a reduction in legal guarantees?

[Answer] With preliminary investigation, it is placement in assured provisional detention for months, indeed years. It is better to be tried within a month, asking for 30 days in order to organize one's defense. Placemetn in provisional detention will then be decided on by the court itself and not by a single man. This offers many more guarantees that the--fiercely defended--examining judge's procedures.

[Question] What is becoming of the preliminary investigation reform, setting up the collegiality of judges?

[Answer] This is an inapplicable reform. And there are other priorities.

[Question] Will the law limiting reductions in sentence be applied to all sentenced persons, including those who were sentenced under the previous regime?

[Answer] We will not be able to impose this new regime on everyone for a very simple reason: Today, jurors pass sentence according to the erosion of punishments. They give 15 years so that 10 years may be really carried out. If we strongly reduce this erosion, previous sentences will be distorted. The system will thus be applied only for sentences coming after the vote for the law.

[Question] With regard to identity checks, you have advocated billposting in all citizens' rights commissionerships. In the face of risking unfortunate mistakes, isn't that only window dressing?

[Answer] All fingerprinting and photographing operations will be carried out under the supervision of a judicial police officer, who is not just anybody! This officer is placed under the authority of the public prosecutor's department and sideslips will be punsihed. Billposting in the commisionerships and even the distribution of leaflets are measures that will permit everyone to know his rights, to know that possibly he may refer a matter to the prosecutor.

[Question] Relations between the Ministry of the Interior and the Ministry of Justice are traditionally conflictual. You yourself have regretted "the maximalist attitude of the Ministry of the Interior." What are your relations with Charles Pasqua?

[Answer] The strength of today's security policy is the good understanding between the courts and the police. The police have a difficult task to carry out; they must do it efficiently and courteously. As to a possible preminence of the police over the judiciary, that appears purely fanciful to me.

[Question] What is becoming of the plan to reform the Penal Code, undertaken by Robert Badinter?

[Answer] For the moment, it is in neutral. It cannot be taken up again by the government: Its majority would not accept it. What is more, I do not think that it is of prime importance.

[Question] With all the measures taken against foreigners, aren't you afraid of a revival of xenophobia?

[Answer] The people who are xenophobes will remain so, it's genetic.

[Question] Genetic? Or...cultural?

[Answer] Let us say cultural. It is linked with living conditions: Some Frenchmen do not put up with the proximity of persons who live differently. And then the problem of criminality is in part linked with foreigners, particularly with drug traffic, in the hands of Africans, of Sri Lankans.... With regard to foreigners in prison, agreements are in progress to have them serve their sentence in their country of origin. But there are too many bars to jump over, to begin with those countries who don't want them. It is not on these agreements that I am counting to empty the prisons. As to a possible amalgam between foreigners and crime, I am pointing out to you that two-thirds of the Maghrebins have become French. They are no longer strangers, they are immigrant Frenchmen. Criminality recruits among foreigners in an irregular situation; I am therefore not afraid of the amalgam.

[Question] Would you accept a debate on the restoration of the death penalty at the time of the Assembly debate on the "security" bills? (Editor's note: Roland Nungesser, RPR deputy from Val-de-Marne, yesterday introduced a private bill to restore the death penalty in four cases.)

The question of the death penalty does not come up on the occasion of the debate on the four "security" bills that are going to be discussed starting 24 June in Parliament. I recall, moreover, that in December 1985, France signed Protocol No 6 of the European Convention for the Protection of Human Rights which abolished the death penalty. This protocol cannot be denounced before the end of a 5-year period. In that case, if France, today, absolutely wants to restore the death penalty, it can do so, but on condition that its denounces the European Convention on Human Rights as a whole. That being so, the government has no reason to oppose having a very broad debate take place on the death penalty, allowing everyone to express himself according to his conscience.

[Question] Do you count on using Article 49-3 to have your "security" bills adopted?

[Answer] I hope not, because these bills concern freedoms; we must take time to discuss them.

[Question] After how much time would you consider there is obstruction?

[Answer] Two weeks for the four bills. But we can move more quickly.

[Question] Do you expect an offensive by the National Front?

[Answer] I do not expect unconditional support.

[Question] During the electoral campaign, you had announced, with your victory, "the return of confidence." After 3 months in power, do you consider that you have restored it?

[Answer] The results of the elections have been greeted by a very large movement of confidence and at the same time by the illusion that everything could be done in 24 hours. But in a parliamentary system, we do not act by decree. At present, the public is aware that the government is moving quickly. I will say that confidence is being restored.

[Question] We have the impression, however, that the bosses are dragging their feet....

[Answer] The head of a busines does not decide on investing the way he decides to go to the movies. French business is in a state of weakness. Modernization has not been carried out, contary to what has been said. And then, we do not come out of a managed economy from one day to the next. It is a long march. There is currently a slight improvement on the fringes. In the new legislative landscape of the return, businesses are little by little going to have their first experience of freedom and to begin to invest again.

[Question] And to hire?

[Answer] I have always said that hiring could follow only at a later time. Measures for youth will have a rapid, limited effect. But there will not be an overall pickup in employment.

[Question] The bosses seem to have been scalded by the government's too inciting language. As the former head of a business, how would you speak to them?

[Answer] I would say to them that the government creating the favorable environment that they called for, and it is now up to them to play! But I would find it unjustified to reproach them for not launching an investment program within 48 hours.

[Question] You judge cohabitation harshly: You have said that "it was the least bad of the regimes," or again an "unhealthy functioning of institutions." Why this hostility?

[Answer] The Constitution has a southern side and a northern one. On the sunny side, the president pulls the executive machine. On the shady side where we are at present, the government pursues its action under the critical regard of the chief of state. Even if that takes place with courtesy, I would prefer to be on the sunny side. I am not in favor of the limitation of the executive power, of its paralysis. We cannot reject cohabitation, it is a legitimate situation, but it is neither healthy nor optimal.

[Question] You deny the president the role of arbitrator?

[Answer] No. But in our system, where the president remains the head of one of two camps, and a systematic critic, it is difficult to distinguish the border between the role of arbitrator and that of head of the opposition.

[Question] Matignon seems, however, to adapt to cohabitation....

[Answer] Yes, you can live in this way, as you live with rheumatism or migraine. But you cannot always run as quickly as you would like. In the next elections, thanks to the new ballot, we should come back to the former system, that is to say, to a strong executive power.

[Question] With Jacques Chirac as president?

[Answer] I hope so, of course.

[Question] Aren't you condemning this next presidential deadline to electioneering concerns, for example, by giving in to security demagogy?

[Answer] The government conducts its action solely in accordance with the national interest and we justify this by saying that we are here for 9 years.

9434/6662 CSO: 3519/212 ECONOMIC

STATUS OF DEBTS OF CEMA COUNTRIES TO AUSTRIA

Vienna DIE PRESSE in German 4 Jul 86 p 7

[Article by Erich Hoorn: "Drop in Credit Grants to East; Austria's Largest Debtor is USSR"]

[Text] The debts of CEMA countries in Austria have declined slightly, from 190 billion Schillings in 1984 to 182.8 billion Schillings at the end of 1985. Since the Soviet bloc maintains a credit balance of about 50 billion Schillings in Austria, this means a net indebtedness of approximately 133 billion Schillings. The slight reduction in the status of debts can be attributed to the fact that relatively high repayments were made. Banking circles also stress that some debts are in dollars, the falling value of the US currency automatically reducing the status of debts in Schillings. A typical example of that is the GDR which obtained one—third of its loans in Austria in foreign currency.

The foreign trade expert of the Economic Research Institute, Dr Jan Stankovsky, further stressed that, although Austrian exports to the CEMA countries last year had increased slightly by 2.4 percent, creditintensive deliveries of installations were very weak, so that the need for financing was not as great on that side as in the past.

Experts point particularly to the reduction of Polish debts. This is due to several factors. In the previous year Poland, for the first time in several years, again paid interest on government and government—insured credits, which reduced debts. Furthermore, last year Warsaw achieved a trade surplus with Austria which, for example, was used to service the coal loan of \$300 million granted by a bank consortium. About one—tenth of that amount has been paid back. And lastly, in the opinion of some experts, in debt repayment Poland has treated Austria better than other countries, because there is a particularly close economic interlocking.

Despite the drop in the debt status, Austria's share in the over-all indebtedness of CEMA countries in the West has increased further. Austria's share of Western exports to the East bloc is only about 5

Table: GROSS INDEBTEDNESS OF CEMA COUNTRIES

| | Debts of CEMA countries in Austria | f CEMA es in | Debts of CEMA countries in the West | CEMA i in | Austria's sl countries' in the West | Austria's share of CEMA countries' debts in the in the West |
|-----------------------------------|--|---------------------------------|---|-----------------|---|---|
| | 1984 51111on | 1984 1985 billion Schillings | 1984 1989 billion dollars | 1985 lollars | 1984 19 | 1985 rcent |
| With Western banks | | | | | | |
| Bulgaria | 5 | 7.2 | 1.58 | 2.85 | 14.8 | 14.7 |
| CSSR | 6 | 8.4 | 2.42 | 2.68 | 16.9 | 18.3 |
| GDR | 43 | 34.2 | 8.31 | 10.23 | 23.6 | 19.4 |
| Poland | 23 | 21.9 | 8.92 | 6.67 | 11.7 | 12.7 |
| Romania | 2 | 1.5 | 3.19 | 3.03 | 2.8 | 3.0 |
| Hungary | 26 | 27.4 | 6.93 | 8.63 | 17.0 | 18.4 |
| East Europe | 108 | 100.6 | 31.35 | 37.39 | 15.6 | 15.6 |
| USSR | 39 | 39.3 | 16.64 | 22.63 | 10.6 | 10.0 |
| CEMA countries | 147 | 139.8 | 48.21 | 60.28 | 13.8 | 13.5 |
| With other creditors ¹ | | | | | | |
| CEMA countries | 43 | 43 | 35.25 | 32.92 | 1 | 1 |
| Total | | | | | | |
| CEMA countries | 190 | 182.8 | 83.46 | 93.2 | 10.3 | 11.4 |
| | | | | | | |

1 Trade loans by non-banks

percent, but the proportion of indebtedness of 11.4 percent is more than twice as high.

In 1985, CEMA countries managed to get loan conditions in the West—the best in many years—which expressed themselves in low interest rates and long terms of duration. Besides Poland, most CEMA countries were customers. Gross indebtedness of the East bloc in the West also rose last year from \$83.5 billion to \$93.2 billion.

This year, however, last year's favorable situation in Western credit markets for East bloc states has changed fundamentally: banks are no longer as generous with new loans to the East as before. The director of the Vienna Institute for International Economic Comparisons, Dozent Gerhard Fink, is of the opinion that the 50 percent drop in oil prices on the world market, and the resultant decline in foreign currency earnings of the energy exporting USSR, is enough in itself to lower the country's credit rating.

The small East bloc countries, particularly Romania, Poland and Hungary, must also expect declining foreign currency earnings, since Western countries have restricted their agricultural imports from the East bloc because of the dangers of radioactive contamination. That has hit these countries especially hard. The East Europeans are also important exporters of oil products. Lower oil prices will also have a negative impact on earnings from these deliveries to the West. According to latest reports from Bucharest, that country had to postpone the planned repayment of foreign debts because of a shortage in liquidity.

9917

CSO: 3620/758

ECONOMIC

DENMARK/GREENLAND

BRIEFS

DANISH SUBSIDY SAVES MINE--A unanimous Finance Committee yesterday agreed to grant a subsidy of 33.6 million kroner to the mining company Greenex. Thereby Greenland's only mining activity, at Marmorilik in northwest Greenland, is saved for at least 18 months. The state subsidy to Greenex is a part of a deal between the former owners of the mining company, the Canadian mining firm Cominco, the new owners, Swedish Boliden, and the Danish/Greenland Raw Materials Administration. According to the agreement the state will pay back the 33.6 million kroner which it received as a concession fee from Greenex for the years 1984-1985. [Text] [Copenhagen BERLINGSKE TIDENDE in Danish 25 Jun 86 Sect III p 8] 9287

CSO: 3613/164

ECONOMIC

TAX CHANGES REPORTED FOR INVESTMENTS IN OVERSEAS TERRITORIES

Paris LE FIGARO ECONOM IE in French 30 Jun 86 p 69

[Article by Martine Denoune]

[Text] Until 31 December 1996, investments overseas will give the right to tax advantages. Encouragement is granted to construction.

In order to effectively revive employment and investment in the overseas departments and overseas territories (D.O.M.-T.O.M.), the new governing majority has revised the tax advantages granted to those islands. The supply bill approved by Parliament provides for detaxation of the investments until 1996, or for a 10-year period.

In the view of Bernard Pons, minister of overseas departments and territories, these are really "exceptional measures." Let us examine their scope for individuals and enterprises.

Having been limited to industry, hotels, tourism and new energies, the detaxation is extended to crafts, transport, construction and public works. Moreover, the emphasis is on this last sector: "Our main target is construction of housing," said Alain Weil, technical adviser to Bernard Pons. "Only a building recovery can enable rapid creation of jobs relating to the qualification level of the local labor. Moreover, it will meet real housing needs."

On the tax level, the system of tax deduction for individuals is replaced by one of tax reduction, with effect from 1 January 1986. This is a way of compensating for the great tax advantage given to housing.

As in the past, individuals can invest in the form of shares in companies engaged in these sectors, or in a regional development company working in the D.O.M.-T.O.M.

A new feature, however: the tax advantage can apply to the buyer of a new principal residence, or an investor in rental property. The conditions? It must be a new house for use as primary residence. Thus, intended for one's own use. Or assigned to a tenant for a 5-year period.

The purchase or construction can be carried out directly, or indirectly through a private real estate company having a building constructed.

In fact, the Ministry of Overseas Departments and Territories intends to urge institutional investors to rapidly develop savings facilities associated with these private real estate companies. In a consultation, the partner will commit to rent the asset for 5 years. By this means, he will have the right to a tax advantage and will receive real estate income. In the 6th year, he will be able either to keep his shares or sell them. Take note, however, that on the secondary market the shares lose any tax advantage.

The boost to construction should also attract the attention of Frenchmen living overseas, as well as that of the 500,000 D.O.M.-T.O.M. nationals living in France. Specifically, during the 5 years following the investment, one has the right each year to a reduction in tax on the income. Until 1989, it will be 10 percent of the investment. From 1990 to 1996, it drops to 5 percent. Thus, for example, for an investment made during 1987, the 10-percent reduction will apply for only 3 years (1987, 1988 and 1989.) The 5 percent will apply for 2 years.

These decisions were undoubtedly made to persuade private individuals to invest rapidly, preferably before 31 December.

Obviously, the substitution of the tax reduction for the deduction penalizes taxpayers in the more than 45-percent bracket.

It should be noted, however, that the tax deduction provision is postponed until 31 December for operations approved during this year. Two hotel programs at Saint-Martin are affected by this measure, which should be embodied in a regulation or decree.

Although the stimulus to construction is laudable, one may ask whether residents of the mainland--already turning away from rental investment in France--will take the step into the D.O.M.-T.O.M. As for the overseas Frenchmen, they are generally attracted by investments on the mainland. Whatever the case, at the end of the 5 years, the income added to the appreciation of the investment should at least compensate for the loss of tax benefit in order to attract the purchaser of secondary shares.

For those enterprises subject to the tax on companies or on actual profit, the productive investments in D.O.M.-T.O.M. are deductible from their taxable result. If the case arises, they can have losses that can be carried forward over 5 years.

The sectors involved correspond exactly with those defined for private individuals. In sum, all sectors, except trade.

In effect, the tax deduction is applied in the same year as the investment. It covers 100 percent of that investment, compared to only 50 percent prior to 31 December 1985.

Another change: according to article 12 of the financial adjustment bill for

1986, the approval procedure is canceled.

The result: tax exemption becomes full right for investments of less than 30 million. Beyond this, investments must be brought to the attention of the minister in charge of budget, before they are implemented. "A precaution to insure that the initiative is in accord with the policy planned for the island," it was explained at the Ministry of Overseas Departments and Territories. After a 3-month period, the prior authorization will be considered to have been given.

Finally, an exemption from tax on companies for new job-creating activities is planned to last until 31 December 1996.

All these measures concerning investments of enterprises will go into effect as of 5 September.

[Boxed item: Real Cost of Investment. Let us take the example of a private individual buying a new house in the D.O.M.-T.O.M. prior to 31 December 1986. If he makes it his principal residence, or rents it for 5 years, the following are the tax reductions to which he is entitled:

--Ten percent of his investment until 1989. Or, for an investment of 400,000 francs, a tax reduction of 40,000 francs in 1986, 1987, 1988 and 1989;

--- Five percent of his investment in 1990.

Overall, the tax reduction will represent 45 percent of his investment, since it will add up to 180,000 francs.

Take note, however, that this reduction decreases with the passage of years. Thus, for an investment in 1987, it totals 40 percent; if the investment is in 1988, it only reaches 35 percent; and if in 1989, 30 percent. Finally, any investment made between 1990 and 1995 will get a tax reduction amounting to only 25 percent.]

9920

CSO: 3519/209

ECONOMIC

1986 CORRECTED FINANCE LAW APPROVED

Paris LE FIGARO ECONOMIE in French 30 Jun 86 p 5

[Article by Maurice Ranc]

[Text] Except for review by the Constitutional Council, the corrected finance law has been finally set.

The corrected finance law for 1986, which has been approved by Parliament and will be published in the JOURNAL OFFICIEL after review by the Constitutional Council, includes a number of tax measures that are a first step toward a reduction in the mandatory levies, which had been called for by the majority of the electoral body and promised by the majority of those elected on 16 March.

Tax on Companies

The first article of the law reduces from 50 percent to 45 percent the tax rate on companies applicable to all financial years open as of 1 January 1986. Article 3 of the law of 30 December 1985, which limited this reduction to profits not distributed and left invested in the enterprise, has been repealed.

No change is made in the reduced rate of 15 percent applied to long-term appreciation.

Also, the interim installments for the current financial year will continue to be calculated and paid on the basis of nine-tenths of the preceding financial year. The reduction will thus not become effective until final settlement of the tax, the latter being calculated at the rate of 45 percent, and the sum being smaller to the degree the installment payments were larger. This financial device enables carrying into the 1987 financial year the loss in revenue of 3.8 billion produced by this measure.

Tax Credit

The provisions of Article 158a of the General Tax Code not having been modified, the tax credit remains set at 50 percent of dividends actually distributed, and this produces, in effect, an increase of the latter, which

will rise to 61.11 percent of the tax on companies, instead of 50 percent.

Out of every 100 francs of accountable profit, the total that can be distributed turns out, in effect, to be 55 francs, after payment of the 45 francs tax, and the tax credit will be: 55 X 50 percent 27.50 francs, instead of 25 francs.

In other words, the tax credit will be the same as if the profits had been taxed at the 50-percent rate.

Participation of Employers in Continued Occupational Training and Construction

In order to ease the wages burden caused by hiring of a 10th wage-earner, article 2 of the law exempts employers who for the first time exceed the staff of 10 wage-earners from participation in the construction effort, as well as from participation in continued occupational training.

The exemption is total for the first 3 years following the excess. The total of participations is then reduced by 75 percent in the 4th year, 50 percent in the 5th, and 25 percent in the 6th year.

This new provision, which replaces the one established by article 104 of the finance law for 1983, and which applies in principle to all employers who have reached or exceeded the number of 10 wage-earners since 1 January 1986, risks posing some problems of interpretation, to the extent that it is more favorable than the previous. One may wonder, indeed, in view of the lack of any specific date for going into effect, whether the enterprises currently benefiting from the previous system will not decide to operate under the new law for the remaining period. One may hope that the administration will declare itself without delay on this point.

Abatement on Earnings from Shares and Bonds

The annual abatements of 3,000 francs on share dividends from French companies and 5,000 francs on bond earnings are replaced by a single overall abatement on all earnings from declared securities.

This abatement is 5,000 francs for single persons and 10,000 francs for married couples. It is increased to 8,000 francs for single persons over 65.

Taxpayers having earnings both from shares and bonds will benefit by choosing the full tax on all earnings from their securities.

Gold Transactions

The decree of 30 September 1981, which had eliminated anonymity in gold coin transactions as well as those in gold bars or ingots, and which had required dealers to register buyers and sellers in their prescribed registry, has already been rescinded by the decree of 21 May 1986.

The law confirms this rescindment, but maintains the impossibility of claiming transfers covered by anonymity against requests for clarification and

justification by the tax administration. This provision can only disturb those who sold, during the period likely to be now controlled, purchases previously carried out under the anonymous status.

The obligation to pay by check for anonymous transactions is also canceled.

Repatriation of Assets Abroad

Assets held abroad in irregular status that were repatriated to France before I January 1987 will be regarded as in regular status in relation to exchange regulation, and cannot be subject to any claim for duties, fees and taxes whose application is prior to the going into effect of the law. The value equivalent of these assets in francs will be subject to a special tax of 10 percent, payable during the month following the repatriation. The justifying documents collected by the approved intermediary and the corresponding accounting reports will be covered by anonymity, and the tax and customs administrations cannot require that they be produced.

In case of tax audit, the taxpayer can justify repatriated resources by an affidavit submitted by the intermediary who received the funds and paid the tax. Also, it appears that measures will be taken to avoid the abuses that might result from reuse of this document.

Elimination of Tax on Big Fortunes (IGF)

The IGF is eliminated effective 1 January 1987, but the recurrent levy of 2 percent on anonymous orders is retained.

On the other hand, no rescindment is planned of the 3 percent annual tax currently due on foreign companies owning real assets in France. Since it is the equivalent of the IGF, one can presume, lacking a specific provision of the law, that it is also rescinded.

Moreover, there is no provision for auditing the statements of the previous 5 years, though, in view of the shortening of the recovery periods resulting from article 11-A, declarations made in 1982 can no longer be audited or corrected.

Easing of Tax Audits

The recovery period for audit of tax declarations, which had till now been 4 years, plus the current year, has been reduced to 3 years for all the consecutive checks following notice addressed or delivered to the taxpayer after 1 July 1986. For those begun prior to the latter date, recovery notices after 1 January 1987 will only be able to apply to the 3 preceding years, even if the audit covered 4 years.

The 3-year period is reduced to 2 years for taxpayers who have had only wages, salaries or pensions, but this reduction does not extend to stamp and registration fees. Finally, the period for extended audits of overall tax situations (VASFE) is limited to 1 year, except:

- -- When the taxpayer has resorted to fraudulent methods;
- --When he does not produce his accounting records within the month following the administration request;
- -- When he has obtained additional delays to respond to justification requests;
- -- And when he has had earnings abroad or received directly from abroad.

Also, the period for producing bank account records has been extended from 30 days to 60 days.

Insurance Policies

Following the voting of a Parliamentary amendment, the obligation for insurance companies to provide to the tax administration a list of holders of policies relating to jewels or art objects of value greater than 100,000 francs has been rescinded.

9920

CSO: 3519/209

ECONOMIC

UNION CONCERNED: INCREASED SALES OF COMPANIES TO FOREIGNERS

Stockholm DAGENS NYHETER in Swedish 1 Jul 86 p 8

[Article by Claes J. B. Lofgren: "Swedish Companies Being Sold Abroad"]

[Text] Foreigners are buying more and more Swedish companies. And now, for the first time, foreign investments in Sweden are growing more rapidly than Swedish ones abroad. If this development continues, 15 Swedes out of 100 will have foreign employers by the mid-1990's.

The foreign ownership share of the wholesale/sales companies is already large. In this sector two out of ten work for foreign employers. Major multinational companies chose, and choose, to win over the Swedish market through retailing subsidiaries in Sweden.

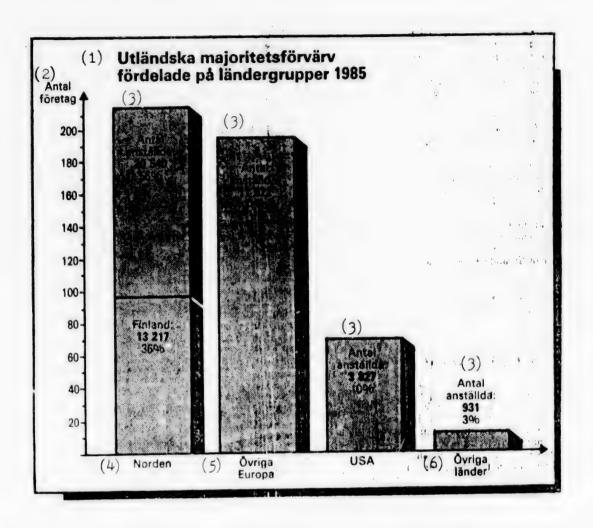
But in the last few years the biggest change has taken place in the manufacturing industry.

"We sort of think that the government authorities have no adequate control over the economic effects of foreign investments here at home. Perhaps we are selling key industries which are then suddenly closed down," says Jan-Erik Moreau, an analyst at LO [Federation of Trade Unions].

Approved Purchasers

The LO is of the opinion that the state should utilize our enterprise legislation more actively. The law regarding foreign acquisition of Swedish companies dates from 1983. It requires that a number of protective interests be satisfied before the government can approve a foreign buyer.

- -- Employment in the community/ies in question
- --Regional policy implications
- -- Impact on preparedness in time of crisis or war
- -- Impact on our national self-determination.



Although foreign investments in Sweden register the largest gain, our investments abroad are much greater in absolute figures. In 1985 Sweden invested 20 billion abroad as against 6.9 billion by foreign investors in Sweden.

Key: 1. Foreign majority acquisitions divided by contry groups in 1985

- 2. Number of companies
- Number of employees
 Nordic countries
- 5. Rest of Europe
- 6. Other countries

And last week the LO had its wishes come true. Industry Minister Thage G. Peterson promised to appoint a commission. It will study how foreign acquisitions affect new investments, research and development and above all employment.

Rauma Closed

A contributing reason for the appointment of the commission is Rauma Repola's shutdown of Stensele Mekaniska Verkstad. This has aroused strong feelings both in the administration and the labor union.

"As far as is possible we should demand employment guarantees from the new owners. If the market declines, it is not possible to accuse the owners, of course. But in the Stensele case it was not a matter of a shrinking market, but of a strategically well-planned decision," Mireau says.

So far the government has never said no to a foreign buyer. The purchase by the U. S. company Transamerica of Alfa Laval subsidiary IMO Inc. was difficult, however. The labor union feared a closing of the pump production in Stockholm—the same pump that is also manufactured in the United States and in an increasingly competitive market. But Transamerica promised the administration that potential structural changes must not mean that the production was moved abroad.

Transamerica also promised IMO's 200 employees continued investments. And last week Transamerica was given the government's permission to buy. Otherwise, knowledge about how foreign companies conduct themselves is scant.

No New Jobs

"We do know, however, that the employment increase in foreign-owned companies is due to the purchasing of new firms--not to new jobs in already established companies," says Peter Sanden, head of a department at the Industry Ministry.

A study by the Central Statistical Bureau shows that employment in foreignowned companies declined just as much as in Swedish ones during the first 3 years of the 1980's. Few people, including the union, doubt the seriousness of the foreign owners, however. What LO is asking for is an analysis of the economic implications, primarily in view of the fact that the foreign purchases have changed character in recent years.

Entire Business Sectors

About a year ago the purchases were dominated by U. S. companies searching for Swedish companies in clearly defined niches. Today, foreigners are buying up entire business sectors.

A flagrant example is Norwegian Statoil's purchase of Swedish Esso. Another is the semi-state-owned Finnish company Outokumpu's purchase of Granges' metalworks and Wirsbro Works. The acquisitions turned Outokumpu into the company with the largest metalworking capacity in Europe.

How does this affect the sectors which are being bought up? And which owners are preferable—U. S. or Finnish? The latter question will become important

since the emphasis of foreign ownership has shifted from the United States to the Nordic countries. In the book "Svensk Industri och Industripolitik" [Swedish Industry and Industrial Policy"], published by the Industry Department, greater structural changes than before are predicted.

Fewer Jobs

The Industry Department writes: "Altogether the qualities of the Nordic owners... in comparison with the U. S. owners... (mean)... a greater likelihood of internal structural changes both in production and market between the Swedish and foreign units.... Contributing to this may also be that Nordic company acquisitions were oriented toward mature and stagnating sectors."

Structural changes rarely lead to more jobs--more likely the opposite. If we are to believe the Industry Department, this Nordic, i.e. Finnish, offensive would reduce employment in Sweden in the long run.

11949

CSO: 3650/264

ECONOMIC

BRIEFS

FOREIGN DEBT REDUCED—The national debt to foreign countries dropped 7 billion kronor during the first 3 months of the year, as reported by the Central Statistical Bureau, (SCB). The total foreign debts on March 31 amounted to 183 billion kronor. The decline of the dollar and the fact that the state has paid off old foreign debts are among the reasons for the reduction in debt. The balance of trade, that is to say foreign trade in goods, services and transfers, shows a surplus of 2.4 billion kronor during the first quarter of this year. That is a strong improvement over the same period last year. At that time the country had a trade balance deficit of about 9 billion kronor. [Text] [Stockholm DAGENS NYHETER 2 Jul 86 p 8] 11949

CSO: 3650/264

ECONOMIC

MINERALS LAG BEHIND OVERALL EXPORT GROWTH IN 1985

Istanbul DUNYA in Turkish 17 Jun 86 p 3

[Text] Ankara—According to the bulletin of the Center for Development and Study of Exports, Turkey's mineral exports lagged behind the growth of overall exports. Even so, however, more foreign currency was earned [than last year] because more value—added products were exported.

According to a study published in the bulletin of the Center for Development and Study of Exports, while only one-ninth of Turkey's mineral production was exported in previous years, this figure rose to one-sixth in 1984 and 1985. While plans call for the export of one-eighth of mineral production in 1989, in the long run it is planned to export a smaller portion of mineral production than the current amounts.

Turkey's Mineral Exports (thousand dollars)

| Industrial | 1981 | 1982 | 1983 | 1984 | 1985 |
|--|-------------------|--------------------------|-------------------|-------------------------|--------------------------|
| raw materials Metallic minerals Fuel minerals | 161,488 31,643 | 149,214 25,190 668 | 156,609 31,894 | 199,301 40,120 63 | 189,545 53,085 136 |
| Total | 193,131 | 175,072 | 188,503 | 239,484 | 242,768 |
| Turkey's total exports Share of minerals in | 4,702.934 | 5,745.973 | 5,727.833 | 7,133.603 | 7,958.051 |
| total exports (percent) | 4.1 | 3.0 | 3.3 | 3.4 | 3.1 |

Mineral exports, whose average value over the last 5 years was around \$200 million and whose average share in overall exports was 3.4 percent, rose slowly but steadily over the last 4 years. Mineral exports rose from \$175 million in 1981 to \$243 million in 1985. In contrast, the share of minerals in overall exports declined to 3.1 percent in 1985. The study says that these figures indicate that mineral exports could not keep pace with the growth of overall exports in 1985 and adds: "Even so, an examination of export statistics shows that no adverse developments have occurred and that, on the contrary, the growth in overall exports stems not from raw materials, but from

semi-manufactured or manufactured products. While this trend depressed mineral exports, it produced much greater benefit because products with higher added value were exported."

According to the study, four-fifths of Turkey's mineral exports are made up of industrial raw materials, of which there are more abundant reserves, and the remaining one fifth is made up of metallic minerals. When broken down into separate items, it is that more than 90 percent of mineral exports are made up of boron salts, directium, magnesia, barite and marbles.

9588

CSO: 3554/109

MILITARY

FAR LEFT PARTIES SEEN ENCOURAGED BY SDP SECURITY POLICY MOVES

'Nonoffensive Military' Plan Viewed

Copenhagen BERLINGSKE TIDENDE in Danish 17 Jun 86 p 4

[Article by Carl Otto Brix: "Social Democratic Party: The Armed Forces Must Preserve Peace and Democracy"]

[Text] One of the proposals in the Social Democratic presentation for a nonoffensive defense system is to the effect of moving a Danish brigade away from Schleswig-Holstein to Jutland-Funen. At sea, surveillance vessels, mine weapons and coastal batteries are to be prioritized highest.

The Danish defense system must be peace-preserving and at the same time must show the political will to preserve the Danish democracy and preserve our right to control our own affairs.

The objective of the defense system is described thus in the presentation which was discussed at the Social Democratic Party's central committee and group meeting last week. The party's chairman, Ex-Prime-Minister Anker Jørgensen, said that the presentation should not be published. Although there is agreement on the basic principles, there are many linguistic expressions which can provide cause for misunderstandings, the explanation was.

The basic principle is described thus: "A non-threatening nonoffensive defense structure is aimed at which is a defense system which by its structure demonstrates peaceable nonoffensive aims, but which at the same time possesses the capacity to work together with other nations in order to inflict on an attacker such losses in and from one's own sovereign territory that an attack cannot be assumed beforehand to result in a successful outcome for the attacker."

One of Denmark's primary duties in the NATO alliance is to alert in the Baltic area, it says in the presentation. Other countries whose territories are not directly threatened can have the duty of contributing reinforcements for maintaining land areas.

The armed forces' future materiel investments must aim at coordinated arming of the forces, and priority coordination with the Civil Defense and the civilian reserved must be improved.

It is suggested in the presentation that the armed forces' buildings and installations be disposed of in pace with the implementation of new structures.

The budget for the armed forces is to be kept at the present level.

Operating costs are to be reduced through savings in staff functions.

The 11-man policy committee, which consists of representatives of the defense compromise parties, is to be continued and strengthened.

The land defense system's standing forces must be of such a size that without mobilization or other "dramatic" stepping up there will be the capacity for acting against provocations or disquieting small episodes like landing exercises near the Danish coasts.

Concretely, the presentation suggests that consideration should be given to withdrawing a brigade from the advanced defense of Schleswig-Holstein for the behind-the-lines defense of Jutland and Funen.

But the withdrawal is to take place in accordance with an agreement with NATO so that Denmark will maintain decisive influence in the united command system.

The land defense of Zealand and the islands is to be based, over and above the local defense system, on coastal defense forces and armored forces for coastal defense and for bringing into action against air landings.

For the navy, priority is to be given to surveillance vessels, mine weapons and coastal batteries. The coastal defense system is to be expanded consistent with technological developments and possibilities for a non-threatening defense system.

The air force is to be strengthened, and emphasis is to be placed on a non-threatening air defense effort, including protection of the civilian population.

Engell Criticizes Jørgensen Stand

Copenhagen BERLINGSKE TIDENDE in Danish 17 Jun 86 p 4

[Article by Carl Otto Brix: "Hans Engell Does Not Like the Idea"]

[Text] Defense Minister Hans Engell (Conservative Party) regards with the greatest seriousness the demands which the Social Democratic Party's chairman, Ex-Prime-Minister Anker Jørgensen, has raised concerning the fact that Denmark should reject nuclear weapons under all circumstances.

"Such a decision would be even more serious than the two-track resolution regarding the deployment of missiles in Europe which Anker J ϕ rgensen's government entered into," Hans Engell says; "it strikes quite centrally at NATO's basic thesis, which says that the defense alliance must be able to use nuclear weapons if it is necessary."

"A resolution like the one Anker Jørgensen is advocating will raise the question of whether Denmark can continue to be a member of NATO's nuclear planning group and of the united command's future," the defense minister continues. "It is always a Dane who is supreme commander of COMBALTAP, which covers Schleswig-Holstein, Denmark and southern Norway. Can this continue with a Danish rejection of nuclear weapons in every situation?"

The defense minister says that on the part of the Danes it is also necessary to think of Norway. The Norwegian defense is concentrated in the long northern sections of the country, with the assurance that Denmark will make its contribution in the area which also includes the southern part of Norway.

The defense minister believes that if a majority in the Folketing decides that allied reinforcements, which the government is asking to have landed in Denmark, also cannot bring nuclear weapons along, Denmark will have to prepare itself for poorer protection than the other European NATO members, because then the country will become the weak link in the chain.

"Denmark will certainly, just as France, be able to continue as a NATO member," the defense minister says, "but it is a peculiar situation to be a member of a club without advocating the club's purposes clause."

The 19 resolutions which have been passed by a majority in the Folketing, outside the government, regarding nuclear policy have according to the defense minister's assessment not hampered Denmark's taking part as a full member of NATO.

On the other hand a decision that nuclear weapons may not be deployed on Danish soil either in time of peace, crisis or war would.

"Such a decision would be a definitive break with NATO's nuclear strategy, and it would begin a chain reaction," Hans Engell says.

Jørgensen Plan Jeopardizes Reinforcement

Copenhagen BERLINGSKE TIDENDE in Danish 17 Jun 86 p 10

[Editorial: "Said and Meant"]

[Text] Anker Jørgensen says that he has not said anything else than what he has said hitherto. The Social Democratic Party's chairman, who talks so much, can hardly avoid now and then coming out with statements which at their face value provide a different content than what he had in mind. But it is just as certain that the Social Democrats under Anker Jørgensen's leadership have over four years step by step sharpened their views on Denmark's foreign

and security policy. And in addition is the fact that the party chairman is obviously allowing himself to be led by a personal ambition of, as a politician—and preferably as prime minister, giving the rest of the world a push in the direction which corresponds to his ideal notion of how the world ought to be. Therefore, it could be observed that Anker Jørgensen the other day in a somewhat bombastic fashion maintained that the Social Democratic Party will oppose nuclear weapons' being received on Danish soil both in time of peace and crisis and in a war situation.

If the Social Democrats really hold this opinion, and if they want to try to carry it through to a resolution which forms the basis of the country's policy, this would be an expression of a clash with the plans for reinforcements which are the basis of NATO's defense. It would be impossible for Denmark and its allies to maintain the defense systems which are the backbone of the necessary planning, and it would have a number of political and practical consequences which stretch far beyond the country's own borders. It is understandable that the government parties, confronted with such a situatica, have to ask themselves whether the Social Democrats are thereby bringing the country beyond the limit which the government cannot resign itself to seeing overstepped. It is not just a question of Denmark's losing all credibility in relation to the common defense alliance. It is also a question of making such demands to the country's allies that they to a considerable extent must alter their plans for the defense of the northern region and thereby weaken their possibilities of maintaining an effective defense system.

Understandably enough, in parties on the left of the Social Democratic Party--and of course also among the Radical Liberals--there is readiness to support a Social Democratic initiative, and there is no doubt that the Folketing will come to take a stand on the issue when it meets again. There are enough people who want to withdraw the country from NATO. However, Anker Jørgensen claims that he has said only what he has said all along. In this case he and the party are taking the stand that they will work to avoid nuclear weapons on Danish soil, and this is something else than rejecting them in advance. Perhaps Anker Jørgensen used the wording without thinking what the words meant. Perhaps he has realized that his party, too, wants to maintain NATO membership and that for the Social Democrats too there is a limit which cannot be overstepped. Under any circumstances he said something the should not have said. He will surely never learn to mind his tongue.

Petersen Lauds 'New Situation'

Copenhagen BERLINGSKE TIDENDE in Danish 19 Jun 86 p 5

[Article by Ole Dall: "Socialist People's Party Applauds Proposal for New Nuclear Weapons Policy"]

[Text] Gert Petersen (Socialist People's Party) thinks, in contrast to Anker Jørgensen (Social Democratic Party), that with the demand to reject nuclear weapons in time of peace, crisis and war a "new situation" has arisen.

Anker Jørgensen's statements regarding no to nuclear weapons on Danish soil have been interpreted widely differently at the top of the Social Democratic and Socialist People's parties.

"Not surprising." "Nothing new," Anker Jørgensen says, who—as reported in BERLINGSKE TIDENDE today—thinks that it was already established in the resolution of 3 May 1984 that it is necessary to work for Denmark's remaining nuclear-weapons-free in time of peace, crisis and war.

The Socialist People's Party's chairman, Gert Petersen, has a different view of the matter:

"With the Social Democratic Party's demand that the government must indicate to the other NATO countries that Denmark does not want to have nuclear weapons, either in time of peace, crisis or war, a new situation has arisen, which the Socialist People's Party welcomes. If this stand is stuck to, it can have consequences for our security policy when the Folketing meets again," the Socialist People's Party's chairman says.

Gert Petersen refers to the fact that it reads in the May resolution that not deploying nuclear weapons in Denmark in war, peace or during a crisis is to be worked for—but that this work should be done in connection with the creation of a Nordic nuclear—weapons—free zone.

"The work for this ought not to rule out the fact that Denmark itself renounces the use of the suicidal nuclear weapons. Therefore it is good that the Social Democratic Party has come to the conclusion that Denmark must make its point here and now to the other NATO countries," Gert Petersen says.

It is expected that the Socialist People's Party and Socialist-Left Party will attempt to pressure the Social Democratic Party toward a new sharpened resolution regarding this subject, but at the Social Democratic Party's top they are apparently satisfied with the wording of the passed May resolution.

Any resolution which rejects nuclear weapons on Danish soil and thereby encroaches on NATO's reinforcement agreements will unleash a general election. Both the prime minister and foreign affairs minister maintained this.

'Decentralized Defense' Plan Urged

Copenhagen BERLINGSKE TIDENDE in Danish 19 Jun 86 pp 12-13

[Op Ed article by Bjørn Møller, a researcher at the Center for Peace and Conflict Research, working on a project concerning the "nonoffensive defense": "Principles of Warfare"]

[Text] A decentralized nonoffensive defense is poorly in accord with the conditions Soviet officers have been trained to fulfill as the basis for successful warfare. For this reason Denmark will not be a desirable target.

There have been many attacks on the nonoffensive defense. Attacks which especially come from officers' quarters. And attacks which (quite understandably) are based on the authorities one is brought up on as an officer-that is, old Clausewitz (just published in Danish) or the so-called "principles of warfare"--which can be found, for example, in materials from the Army Officers School. The general attitude seems to be that when the non-offensive defense's principles go against the traditional wisdom, then something is wrong.

However, it is also possible to turn the argumentation upside down: They also read Clausewitz and study the principles of warfare at the military academies in the Soviet Union. We should therefore take our point of departure in their conception and set up a defense system which goes against as much as is at all possible their conception of the "ideal war".

To begin with Clausewitz, it is often claimed that the Soviet Union got from him (via Lenin) the principle that "war is a continuation of politics with other means." And that they therefore will use their military forces whenever they can harbor hopes of thereby achieving political goals. It can be questioned, but even if it should be right, the Soviet military doctrine nevertheless sets certain limits for what types of military operations will be able to be used for which purposes:

To resort to another authority, this time Peter Vigor of the British military academy at Sandhurst, Soviet planning demands three conditions to be fulfilled before a military attack will be begun: A. The war must be kept limited. And B. It should take place quickly, like a blitzkrieg. And, finally, C. The war's objective (which accordingly must be fulfilled quickly and under limited conditions) is the complete defeat of the military. (Footnote 1) (P. Vigor. "Soviet Blitzkrieg Theory," New York, 1983.)

Quite logically, for that matter, since the Soviet Union in part is familiar with the dangers of a nuclear war (and for this reason will desire to keep any conflict under this threshold), and in part, as we know, is inferior in all those areas which would be of decisive importance in a longlasting war: its economy, size of its population, internal "solidarity strength", allies, etc.

In other words, if the Western defense system can ensure that it cannot be completely defeated in the course of a short time by conventional means—yes, then we should have frustrated any sinister designs of any Soviet war planners. And what more can we ask for?

We now come to the "principles of warfare" themselves, i.e., the strategic, operational and tactical means with which the Soviet Union, should the occasion arise, would seek to achieve the above-named goals.

The nonoffensive defense must of course be tailored to these principles, which, however, does not mean to copy them. On the contrary, the nonoffensive defense should seek to make the Soviet "principles of warfare" inapplicable

and obsolete. That is, make it impossible for the Soviet leaders to carry out an attack such as has been presupposed in their officers' training.

The Soviet principles of warfare resemble the Danish. However, since it is the fewest Russian officers who have attended the officers school at Valby Hill, there is no reason to trouble ourselves unnecessarily. Let us instead look at the Russian principles themselves, which are found in many, but not particularly different, versions. They are taken from a report which can be found in the American army's journal: (Footnote 2) (C.N. Donnelly. "The Development of Soviet Military Doctrine," MILITARY REVIEW, August 1982.)

There are eight such principles: 1) Speed in combat operations. 2) Concentration of the effort for the purpose of creating an upper hand at the decisive time and place. 3) Surprise. 4) Aggressiveness in battle.
5) Preservation of one's own combat capacity by a) thorough preparation and efficient organization, b) efficient command and control, c) high morale. 6) Realistic planning. 7) Working together of all arms. 8) Depth in the attack.

Let us look at how the Russian generals would put these principles to use against a nonoffensive defense consisting of small but very mobile units in a very scattered and "space-covering" formation and with a considerable degree of decentralization. And let us just use Denmark as a "theoretical guinea pig"—in spite of the fact that Denmark will hardly be an isolated target for an attack.

The requirement of speed (1) can of course easily be fulfilled as far as an invasion of the territory is concerned. There is no—or at most a limited and penetrable—defense line to penetrate. Although defensive mine fields and a defensive air force can really be annoying enough! But after its invasion, the attacker, as mentioned, must ensure the complete defeat of the military. And here dispersion offers the best security. A cleanup operation—which can be undertaken only by dismounted infantry—would be very time consuming. Also, even if the attacker is not particular in its choice of means. Terrorism against the civilian population can in this respect only be of any use if the civilian population actually can report anything of importance. But even if the Soviet special troops (Spetsnadz) in the worst case (as has been intimated) cut Mrs. Jensen's ears off, she can at most disclose where Soldier Olsen was yesterday. But not where he is now—or where his colleagues Hansen, Petersen, Nielsen, etc., are.

The surprise factor (4) can of course be ensured—if the attacker refrains from previous mobilization and besides "steals away on his toes." Even a nonoffensive defense must, however, under all circumstances include an efficient warning network. And preferably one which is more decentralized than the existing one, and thereby more difficult to put out of the running through electronic warfare, and the like. But even if the surprise should be totally successful it will not especially help against a nonoffensive defense. It is at most the initial operation (the landing at Køge, for example) that can come as a surprise. When the enemy has managed to have finecombed the area around Vejle, there will no longer be anyone who will be

surprised. Then it would be just the attacker himself who will not be able to plan in advance where the defending forces will strike!

Concentration of the effort (2) will be very difficult, for the defender will not define beforehand by his formation where the attacker is to concentrate his effort. There are no large troop concentrations, command centers or the like which would constitute natural concentration points. Of course, political centers, etc., will be able to be selected as targets—but here we land in any defense system's inevitable dilemma: Such centers can never be defended totally. And if they are really "centers," the enemy will at any time be able to bomb them to pieces—or threaten the same as the German attackers did on 9 April. The only answer to this dilemma is surely that which, for example, Yugoslavia and Rumania have given: to establish (via legislation) that any order of capitulation is invalid—so that resistance will continue even after the "center's" surrender. Even though such a law was not to be found, the resistance movement's fight during the occupation shows clearly that this was the way a large part of the population understood the situation!

Aggressiveness in battle (4) means, largely speaking, the preservation of initiative via offensive warfare. But it is precisely this initiative which the nonoffensive defense will take away from the attacker by operating offensively. Apparently a self-contradiction—but at the same time it is a question of a longlasting battle in one's own territory and it is the defending forces which are to fight the attacking forces, which consequently will have to "entrench" and operate defensively. It is up to the defender to choose the time and place for battle. A tactic which has been utilized over the centuries with great success by guerilla forces all over the world.

The preservation of one's own combat capacity (5) will be an important objective for the attacker, who is now confronted with a battle of attrition on the defender's premises. Everything cannot be kept in readiness in advance (5a); at some point in time one "runs dry." Something the Soviet troops at that in many areas are doing before so many others. They now have to ensure themselves constant supplies of fuel, spare parts, ammunition, etc. A "logistic" task which becomes difficult when one has barricaded oneself, while the defender operates in the surrounding terrain—such as the guerillas are doing in Afghanistan.

The efficient command and control (5b) will be difficult—precisely because the battles will take place in scattered fashion. And if there is anything the Soviet troops do not possess to excess it is precisely flexibility, a capacity for improvisation, and initiative at the lower levels. On the contrary, everything is attempted to be planned in advance and centrally controlled (6).

Should the attempt be made all the same—as has been done with extremely limited success in Afghanistan—to delegate some decisions downward, and should one at the same time have landed in a longlasting fighting situation—then morale (5c) will suffer catastrophic damage. Especially because "morale" in an attacker must of necessity be based on lies—at it was, for example,

in the invasion of Czechoslovakia in 1968. And the lie is disclosed more and more the longer the fight goes on and the closer to the defenders one comes. It was not for nothing the original divisions in Czechoslovakia had to be replaced very quickly, just as was done (and is being done) with the troops in Afghanistan.

Because of the Soviet "planning fixation" the working together of all arms (7) will also be difficult as soon as the operation cannot be planned with staff maps in advance—or as soon as the planning done breaks down. The requisitioning of air support, supplies, etc., cannot as a matter of course be done by the officer who notices the need, but must be done through long and often blocked command channels.

Of course, the attacker can easily achieve depth in the attack (8). However, what is at least just as important, and unequally more difficult, is to achieve continuity over all this depth. It is possible to penetrate almost just as far as is necessary, with planes and missiles. But as long as the rest of the force does not come along, this does not help any. Such continuous depth can be difficult to achieve, and even more difficult to maintain—even in a tiny country like Denmark. We consist mainly of islands—which, as we know, are characterized by being separated by water. The enemy troops must, in other words, "change their environment" (from land to water and vice—versa) incessantly. And changing of environments is militarily incredibly demanding—and vulnerable. Each time the enemy has to go from Langeland or from Falster to Zealand, in other words, he is vulnerable—whether he uses bridges (which can be blown up), ships (which can be shelled or sunk), or planes (which are perhaps invulnerable at high altitude but vulnerable when they take off or land).

Of course, such warfare will not be without (high) cost to the civilian population, if determent fails. There is no "defense without tears." But the same is true to an even higher degree for the existing defense system with its foreseen use of nuclear weapons. The decisive thing is not to slip through a war unscratched, but to avoid it!

If one understands the "principles of warfare" as the attacker would use them, accordingly there is not much to indicate that Denmark with a nonoffensive defense would constitute a desirable target for a Soviet attacker. Accordingly, we should have a considerable—but different—determent capacity.

In addition is the fact that by our having "only" a nonoffensive defense system we will not provide any incentive for preventive attacks (for military purposes). And that a nonoffensive defense system to a greater extent than one that is based on first use of nuclear weapons, deep strikes, etc., would be able to enter into a detente process. Detente which also will have a war-preventing effect, among other things, because the Soviet Union, as do we, has economic and other advantages from detente. Therefore, we would be able to add to the military determent a considerable non-military restraint. And thereby make war even more improbable than it is today.

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MILITARY

KNUD DAMGAARD EXPLAINS COMMITTEE'S 'DEFENSIVE DEFENSE' DRAFT

Claims Would Promote Detente

Copenhagen AKTUELT in Danish 21 Jun 86 pp 10-11

[Op Ed article by Knud Damgaard, Member of the Folketing from the Social Democrat Party: "Defensive Defense Structure"]

[Text] In connection with the thoughts about a non-threatening defense structure which have entered into consideration of modernization of the defense, there have been several comments made about its contents before the proposal is finalized. A consistent thread running through the comments has been ironic statements about the concept of a "defensive defense." Regardless of whether the comments are due to a lack of knowledge about defense, or merely an ironic political interpretation, they are equally uninformed. What is being described is actually a defensive defense structure. Such a concept is naturally not unknown to those who in practice concern themselves with defense. They know very well what is involved, and it is also characteristic that such comments coming from officers are rejections based on another basic view of the security policy situation than the one which is held by those making the proposal.

Where does the difference of opinions lie? First and foremost in the assessment of NATO's objectives. Some have the firm impression that we will experience unchanged conditions in that part of security policy that includes East-West problems. That fits very poorly with Washington's explanation in 1984 which expressely gives equal weight to considerations of military security and peacekeeping activities which reduce tensions, which are necessary. Personally I do not doubt that if one believes in tradition, considerations of reduction of tensions will be set aside, and East-West relations in the coming decades will bring about a development, created by increased mutual fear, which will continue the unpleasant arms race with increasingly destructive weapons. Such an event will make it very difficult to maintain broad support for necessary NATO policies.

This side of the issue has caused most Social Democrats in Europe to want to strengthen tension-reducing policies. This applies to a large extent to the German Social Democrats, who have put forth a defensive defense structure which is much more extensive than that put forth by the Danes. Yet with great

emphasis on a strengthened defense of the hinterland. In both cases the proposals are adapted to NATO membership, including the reinforcement policies, and therefore cannot create any great problems for NATO. If equal weight is desired for military and reduction of tensions, it is natural that one must consider to what extent reduction of tensions can be built into a military structure. That is what the German Social Democrats (SPD) are doing. And that is being considered by the Danish Social Democrats also. An essential element of this is a defensive defense structure. It is obvious that such a structure can be carried out in breadth and depth when both sides are so inclined. That should not prevent a Western country from establishing a single element of such a structure when conditions call for it. Only this way can a confidence-building activity take place. It is also an advantage that the changes will strengthen the effectiveness of the defense.

The thinking taking place in the Social Democrat Party corresponds to the above remarks. Even though we must consider further possibilities in connection with the modernization of the defense and the development of East-West relations, we begin with a defensive structure in a single area. This beginning is a natural extension of the decisions made in 1984 when the defense agreement was approved. At that time it was decided that the frigates would be phased out in 1988 and the submarines in 1994. That we will have submarines until 1994 does not necessarily mean that they will be used in the Baltic.

To replace these units in Baltic defense a coastal defense system will be established with modern missiles which will be mobile and which will have a survival rate which is impossible for deployed ships in the Baltic. In the first phase coastal defense will start with the missiles which will be controlled by the frigates. Then the F-16's, which are equipped with old-fashioned "iron bombs", which require that they fly in over enemy territory to reach their targets, will be equipped with missiles which can reach targets in the Baltic from over our own territory. It is under these conditions that a defensive defense structure is established. If anyone objects that we cannot defend ourselves this way, he is overlooking the tremendous destructive power of the defense systems named. This will add a significant contribution to the West German Baltic defense.

This is largely an expression of inter-service solutions. solutions it will be impossible for the small NATO countries to contribute to NATO's total defense effectiveness. Inter-service solutions are furthermore A single aircraft with modern surveillance possible in surveillance. equipment could give more information about the Baltic per hour than ships of In addition if one considers defense on the fleet can give in several days. the basis of the gradually obsolete NATO policy of specialization (division of tasks in regional areas in NATO) one would find that the effectiveness of defense could be raised still higher. This specialization has great possibilities which can best be understood if instead of specialization and/or division of tasks one uses "inter-regional solutions."

Against the given background it is my opinion that the beginning of a defensive defense structure cannot reasonably be criticized as being a weakening of our defense. Only by continuing to adhere to the unchanging

status quo in the security policy picture between East and West will our defense be weakened. It will first be seen in the absence of backing from the people. Such absence of change is not NATO policy and neither is it in agreement with the people's desire to test every possibility of reducing tensions.

Even though the defensive structure is based on decisions already made which necessitate changes in Baltic defense, that becomes a strong element in the military objections that we are destroying the reinforcement program. contrary, we want to open for negotiation whether it is right to send the three Jutland brigades to Slesvig-Holsten. The reason is simply that in that case we will let it depend alone on the mobilization forces to ensure that the mobilization facilities are in order. That applies largely to our air If it is possible for the enemy with the help of a landing to remain a sufficiently long time on the air stations, all the necessary electronic equipment will be destroyed and the runways made useless. idea is criticized of being satisfied with two brigades in Sleswig-Holsten it must be because even a highly mobile brigade cannot cover all of the battle tasks necessary to protect the air stations. Since it is important to be in Sleswig-Holsten we must be satisfied with it, and a little is better than nothing.

Who will carry out these new ideas? Many have the impression that the Social Democratic ideas are an invitation to SF [Socialist People's Party]. That is not the case. If the present government remains through the entire period, and thereby postpones the election until the fall of 1987, it is the duty of the government parties and the Social Democrats to negotiate the conditions which will apply for the defense from 1 January 1988. The Conservative attitude, expressed by Knud Ostergaard in JYLLANDSPOSTEN, that if the idea of defensive defense structure is sustained we must wait until after an election for negotiations, appears to me to be a slur on the defense, which must have a certain time to organize itself after the decisions are made. Negotiating in a reasonable time will naturally not change the basics which Social Democrats chose to negotiate on, but regardless of the basics it is my opinion that when it concerns a number of large issues in society, including defense, there is a duty to seek the broadest possible support for an attainable result.

Damgaard Interviewed on Proposals

Copenhagen BERLINGSKE TIDENDE in Danish 27 Jun 86 p 6

[Interview of Danish MP Knud Damgaard by Carl Otto Brix; date and place not given; first paragraph is BERLINGSKE TIDENDE introduction; passages within slantlines published in italics]

[Text] The Social Democrat spokesman for the defensive defense, Knud Damgaard, reports for background on a defense which, according to his party's opinion is a defense which will not strike first, and which will not attack.

A defensive Danish defense will be a confidence-building organization. It will make its modest contribution to preventing war. If a war still comes,

all the good organizations will fall to the ground and the war will follow its own course.

This is approximately how Knud Damgaard, the Social Democrat defense/political spokesman expressed himself, and he added that in addition Danish defense can be strengthened at the same time. He is the originator of the debate memorandum about a defensive defense which the Executive Committee and the Folketing Group of the Social Democrats have accepted. What the memorandum will finally look like, however, is unknown, as it is to be rewritten. As party chairman Anker Jorgensen said, changes in the contents could be misunderstood.

/Can a small country such as Denmark in fact have an offensive defense?/

"If by that you mean a defense which can damage the Soviet Union, the answer is no. What is involved is that in the present defense agreement we have some elements which assume that something new will be established, and that something new cannot be other than more defensive."

/What is a defensive defense?/

"From a political interpretation it is a defense which will not strike first, will not attack. What we are talking about with the Danish defense is a defensive buildup similar to that proposed by the German Social Democrats for the benefit of Germany. It will be unfit to strike first."

/Can the existing Danish defense strike first?/

"It can indeed. In any case it can attack outside its own area. One of the important elements which makes our proposal a strength instead of a weakness is that we have agreed that the F-16 fighters will be equipped with missiles and not with the iron bombs which require us to go deep over Soviet, Polish or East German territory to use. The type of missile with which we will equip the F-16 can reach 50-60 kilometers out into the Baltic. And with the coastal defense we will have instead of the frigates we will be able to reach 100 kilometers out in the Baltic. That gives survival possibilities which the big ships do not have."

/According to the Social Democrat proposal, will a brigade be withdrawn from Slesvig-Holsten to Jutland-Funen?/

"The thing that can prevent Denmark from receiving reinforcements is if the airfields, for example Karup, are destroyed. If the Russians use an airborne brigade—they have eight in all—for a landing at Karup, they will destroy all the electronics before they are captured. Jutland's defense begins with Jutland's roots, but we cannot afford to let all three brigades be placed in Slesvig—Holsten. One brigade will protect Karup."

/You fought in the negotiations up until the last defense compromise to do away with the submarines?/

"The issue is rather simple, that the submarines' most important mission will be to prevent an attack on Slesvig-Holsten. Nobody imagines that the Russians are so stupid as to sail out in the middle of the Baltic where the water is deep enough for submarines. They will use the 12-14 meters of water along the Polish and East German coasts, where submarines cannot survive. Therefore it is much more valuable to support West Germany with missile-equipped aircraft and coastal defense."

/A political basis for a defensive defense?/

"We are living in a time of change, and the question is whether we will live up to the UN declaration on reduction of tensions, that military considerations and peace-keeping activities should be equal. That can be done in so many ways. With time it can mean giving conventional forces a defensive structure. That cannot be done without mutual agreement. But Denmark is in a situation whereby we must change in the Baltic, and we can therefore use the opportunity to strengthen Baltic defenses. So I will flatly admit that it can only have the mission of being a kind of confidence-creating organization. And that does not lessen the ability of the defense forces to be employed."

/Is there any reciprocity in this?/

"Everyone knows that a general defensive defense structure depends on reciprocity between East and West. Therefore this is a very tiny beginning, and I do not know why it has created such a great debate. I am sure that the Air Force knows that what is to happen with the F-16's is a strengthening of the defense, I am sure that the Navy recognizes that setting up coastal defense missiles is a strengthening in comparison with the vulnerability of the big ships."

/Is this proposal the first step in an arms reduction or disarmament?/

"It is a very modest contribution to reduction of tensions. I know very well that it will not stand up in wartime. Everybody knows that. War follows its own course."

/Why did you start this debate?/

"We have a party program which calls for a defensive defense structure, and this is therefore a good time to put it into effect without damaging Denmark's defense."

Knud Damgaard Profiled

Copenhagen BERLINGSKE TIDENDE in Danish 28 Jun 86 p 5

[Article by Carl Otto Brix: "His Last Achievement"]

"The worst thing is that Knud Damgaard is the only Social Democrat who has studied the weapons systems."

This headshaking outburst from an officer perhaps hits the nail on the head. Knud Damgaard is certainly the Social Democrat who knows the most about what modern high-technology weapons can do. That he is using his knowledge to turn everything upside down must naturally bring most traditional friends of defense to despair.

The so-called defensive defense being formed by the Social Democrats is his work, and yesterday he talked about its essential features in BERLINGSKE TIDENDE. Otherwise the Social Democrats have attempted to conceal what the proposal is all about. It is said that Chairman Anker Jorgensen really is not warm toward Damgaard's plan, which he did not ask Damgaard to prepare.

Knud Damgaard is on his last term in the Folketing. He is 68 and will not run again for reelection. The area of Koge has elected him since 1971.

Knud Damgaard has led an especially versatile life. He has been a shop assistant, workman and hotel porter before he began to work at a desk in insurance and advertising, and in the past generation as editor of HJEMMEVAERNETS BLAD [Newspaper of the Home Guard]. He began with that in 1945 after having been involved with the illegal work on Frode Jakobsen's "Ringen". His critics say that he uses/misuses the newspaper to advance his own ideas, which could without exaggeration be called untraditional. While Poul Sogaard was defense minister he was temporarily appointed as the senior civilian in the Home Guard from 1977-82.

In addition to defense he has occupied himself with housing policy in the Folketing. The housing paragraphs are almost as complicated as advanced weapons systems.

He also has an artistic flair. He can both write and sing songs, to the delight of the Christiansborg Review, among others.

This versatile man is, however, especially unpopular in certain circles, which see him as one of those who have turned social democracy upside down, and made the old party unrecognizable.

Using his knowledge, but without playing a great political role, he has also done his best.

9287

CSO: 3613/165

MILITARY

FAROE ISLANDS MP: FAROES SHOULD TAKE GREATER ROLE IN DEFENSE

Copenhagen BERLINGSKE AFTEN in Danish 20-26 Jun 86 p 17

[Op Ed article by Oli Breckmann, editor of Torshavn DAGBLADID and member of Folketing: "Faroes Should Be a Sea Fortress in the Atlantic"; first three paragraphs are BERLINGSKE AFTEN introduction]

[Text] "Denmark should not forget that the Faroe Islands, which are still a part of the kingdom and are still Denmark's political and defense responsibility, are situated in the most exposed part of the area of conflict between East and West. That is where the battle for the Atlantic of the next war, if it comes, will be fought," writes Oli Breckmann, editor of the Torshavn DAGBLADID and member of the Folketing for the People's Party (a conservative, pro-independence party) in this Op Ed article.

At the same time Oli Breckmann offers a political change of course in defense policy to the People's Party congress this fall whereby "the party will change course from sympathetic neutrality to active strengthening of NATO according to our meager ability, even if for reasons of population it cannot include conscription or stationing of weapon systems on the islands.

"But at the same time we recommend," explained Breckmann, "that the Lagting be drawn into the decision-making process concerning the future position of the Faroe Islands as NATO allies."

Even though the world is impressed by Mr. and especially Mrs. Gorbachev's western polish, the Russians still have a PR problem here in the Faroes where the commissar-directed crowd wanders from shop window to shop window, wearing synthetic clothes from faroff times and places, trailing empty plastic bags, the most revealing symbol of the consumer mentality.

At present there are two Russian ships permanently under repairs at Skala Shipyard in the middle and at Vag in the south of the Faroes. Strategically very well chosen stations.

In spite of everything Socialism has improved the living conditions of these permanently melancholy and shabby looking seamen since that time during the Stalin years when I remember as a child their rusted fishing craft with closed gangways, forced into the harbor by a devastating typhus epidemic onboard.

With such a first memory my idea of their standard of living could hardly go down.

The cold war began for the Faroes with the Defense Law of 1951 which made the Faroe Islands a "naval district" (later a "naval command") with a land-based radio station to serve Danish inspection ships, which took over the old fishery protection and expanded it with a rescue service.

With its entry into NATO in 1949, Denmark automatically brought in the Faroe Islands, since the home rule law of 1948 made foreign and defense policy the responsibility of the kingdom.

The Danish military of 5 May 1945 had a lot to be modest about—on the Faroe Islands as well. All the grownups remembered thousands of "real" British protection troops and dozens of the world's finest warships, so only the youngest generation of children were impressed by the Danish peacetime Navy, while the British trawler thieves left the Danish Navy behind.

An unfortunate combination, which strengthened the nationalistic ground swell, existed in the already disturbed Faroese political waters. The economic crisis and the medical conflict of the 50's provided fertile soil for republican agitation, the support troops of which were a hodgepodge of disappointed Danes from 1946 (when the majority of the plebiscite narrowly chose secession), romanticists of the "shoeleather" category, and of course the Marxist clique of asphalt Faroese who came home after their education and complex isolation in Copenhagen during the war.

Fear of the introduction of conscription and the death penalty carried republican NATO opposition to hysterical heights, which culminated with the homecoming of the social democratic administrator Peter Mohr Dams from Copenhagen in 1959 with the early-warning radar station at Sornfelli in his political beggar's bag.

At that time we had, both in Denmark and the Faroes, defense-conscious Social Democrats whose grassroots were solidly planted across the political middle. That lasted far into the 60's, and faded during the past decade.

The Faroe Islanders' traditional neutral attitude toward European alliances was manifested by two Lagting bills of 1961 and 1970, which were interpreted by the moderate parties as opposition against storage of war material, but by the fanatics as a protest against any (in any case Danish or Western) defense installation on the Faroes.

Denmark's responsible parties interpreted the technician-manned radar and listening station as the moderate Faroese did, while the Republican Party and increasingly the Social Democrats pointed to Sornfelli as a thorn in the side of the Soviets and therefore a potential bomb target.

The 1968 generation is a Western phenomenon with an antidemocratic view of the world, but a free economic life and the right to own property are basic conditions for capitalism, and capitalism has created greater welfare for the masses than any other social system—without the least help from the many

full- and part-time academics of new obscure disciplines, who consider capitalism as a hindrance to their alchemy, a hindrance which should be pushed aside.

On the Faroe Islands the generation of 68 has also been active. These new power people in public clothing are the intellectual heirs of the New Deal and the New Society, which paradoxically ended with World War II and the Vietnam War respectively, and triumphed with the fall of Nixon. During the following paralysis the NATO countries went into a coma, which gave the Soviet Union a long headstart in their arms buildup until the caricature "peace" movement of the 68 group was again brought to life by the Kremlin--not to demonstrate against the Soviets' open manufacture and deployment of new types of weapons, which increased their military expenditures by 5 percent, while the United States' declined from 9 percent of GNP in 1969 to 5.5 percent in 1979--but to oppose NATO at a time when NATO with the dual decision threatened to answer the threat from 1,000 SS-20 Soviet nuclear warheads with a total of 400 Pershing and cruise missiles within a period of 5 years.

The radar station on Sornfelli was quietly allowed to become obsolete. But the peaceniks ran riot when it was rumored that the station was getting new surveillance equipment. The latent pacifism used Afghanistan as an excuse for its accusations against NATO on the Faroe Islands.

The Faroese radio and TV monopoly was highly critical of the dual decision and Reagan's space defense (which was naturally called "Star Wars"). Nevertheless a Faroese opinion poll showed that 70 percent favored the NATO alliance and 60 percent favored retaining the radar station on Sornfelli, and this manifestation pulled the popular foundation out from under the Lagting decision—makers on the Faroe Islands military dilemma. A Faroese "peace" priest accused me in INFORMATION as the editor of DAGBLADID of being responsible for the Faroese fear of Russia. But it is deplorable that the Faroese information monopoly of the airwaves used 90 percent of its transmission time on war and peace problems reflecting viewpoints which only represent a minority of opinions. But opinion formers are like that everywhere.

The recurrent "peace" march on the Faroes assembles the same barely 200 units, including baby strollers and dogs, and it is covered by the monopoly press as "the walking wounded" following a nuclear attack. These banner-carrying commune socialists are being used by the comfortably-off members of the 68 generation as extras to advance international socialism.

The determined marxist clique of today has conducted its dangerous game so long according to Moscow's plan to cause internal Western weakness that the two Lagting decisions about the radar station on the Faroes have become a drag for these islands, a policy which the People's Party no longer considers responsible if we are also to do our duty according to our very limited ability and help dam up the deluge of Soviet power-based threats and attempts at blackmail which can lead to a catastrophic shift of the iron curtain toward the West.

The People's Party views with concern the immature boy-scout mentality in the Danish Social Democratic Party, led by people in the political panic age group such as Lasse Budtz. It is no longer the old defense-conscious, steady Labor Party which pushed the Faroes into NATO, and without the Lagting's approval set up the radar station on Sornfelli, but a sorry shadow of the pro-west, proud party with "Never again April 9th" on its shield, which is now flirting with available "alternatives" or "defensive" forms of defense. The People's Party will preferably declare at the fall congress that the party is turning away from sympathetic neutrality to active strengthening of NATO in accordance with our limited capability, even though for population reasons it will not mean conscription or stationing of weapon systems on the islands.

But at the same time we will recommend that the Lagting be drawn into the decision-making process concerning the future status of the Faroes as a NATO ally. In that case, however, the Lagting has a skeleton in the closet, namely the broad and therefore so unforgivable blunder it was to approve asking the Danish government to declare the Faroes a nuclear weapon-free zone.

I am sure, however, that this irresponsible action would not have taken place if we had responsibility for our defense policy, since the Faroe Islanders are very conscious of their Western sympathies. Increased political responsibility would surely also improve the Lagting's decision-making ability.

The silent Faroese majority is not letting itself be convinced by the "peace" activists and the opinion monopolists that "both superpowers" are equally bad. It worries us that while the NATO station and the Faroe Islands Naval Command have a personnel strength of only 200 men (many technicians and civilians), the Russian repair fleet has over twice as many who, as everything else in the Soviet war economy, have a paramilitary function. Ten Russian ships could, without the least difficulty, occupy the Faroe Islands before breakfast—just as German "cargo" ships in Danish and Norwegian harbors did on 9 April 1940.

This fact bothers those of us who think farther ahead than to meaningless declarations about nuclear weapon-free zones and unilateral disarmament. Unfortunately our Republican and Social Democratic Lasse Budtzes voted with the usual pattern of seemingly rational extras on the election list, a camouflaging of these left-oriented parties' true intentions in defense policy.

Denmark should not forget that the Faroe Islands, which are still a part of the kingdom and in defense matters are still Danish responsibility, are situated in the middle of the most exposed part of the area of conflict between East and West. That is where the battle of the Atlantic of the next war, if it comes, will be fought, whether we have a radar station or not, and whether we have made a unilateral declaration about nuclear weapon-free zones or not.

Iceland has recently demonstrated its pro-Western viewpoint by making airfields and land areas available for more surveillance material. That is an attitude which should cause us to ponder.

The Russians have broken 40 agreements with neighboring countries since 1917, and it is against the nature of this evil empire to respect an agreement with the Faroes about nuclear weapon freedom, especially when one thinks about the nuclear submarine traffic which takes place from Murmansk through the GIUK gap out into the open Atlantic where American reinforcements in a given situation will be transported to a hard-pressed West Europe under attack.

The Faroe Islands can and should comprise a sea fortress in the middle of this fairway, and in view of the increasing tottering of the Danish leftwing parties on defense questions, the People's Party is considering going into the breech for a more active Faroese political interest in our future role as a strategically placed island group in the area of conflict. The party's declaration of this standpoint in the fall will without a doubt get other parties to follow until the political spectrum in the Lagting reflects the wishes of the majority of the people.

Yes, democracy can function from below.

9287

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MILITARY

NATION TO HOLD JOINT MANEUVERS WITH MCROCCO

Madrid EL PAIS in Spanish 16 Jun 86 p 21

[Article by Fernando Orgambides]

[Text] Tarudant. Spain's and Morocco's air forces plan to conduct joint air exercises in the Atlantic and Mediterranean areas of the Strait of Gibraltar on 23, 24, and 25 June, barring any last-minute unforeseen incidents. Units of both countries will take part in these exercises, reported military sources in Rabat.

The maneuvers, named Atlas 86, are the third of this type arranged by both general staffs. They will test joint defenses of the Strait in the hypothesis of an air attack coming from an eastern Mediterranean country.

The sources stated that Moroccan F-5 and F-1 fighter bomber units deployed at the air bases of Sidi Slimane and Mequinez will take part in these exercises on Morocco's behalf.

Spain's air force will use the same type of aircraft (F-5 and F-1 from the bases of Moron de la Frontera and Albacete), plus Mirage 3 from Manises in Valencia. Both countries' defense systems will be linked, and aircraft of the two air forces will fly together in different squadrons, so that they will avoid testing the capabilities and operational qualities of the two nations against each other,

Atlas 86 is the third exercise which the general staffs in Madrid and Rabat have prepared jointly since 1984, when it was decided to conduct this type of maneuver on an annual basis, "always with the objective of blockading the Strait in the event of a hypothetical attack from the Mediterranean."

"Technical Difficulties"

Last year the Spanish government decided to postpone the dates of the maneuvers, officially citing the existence of "technical difficulties," while they actually wanted the change because the initial time coincided with the visit of the Algerian president, Chadli Bendjedid, to Madrid. He is the first Algerian chief of state to visit Spain.

For this year's maneuvers, there seems to be no problem with dates, "though the dates were just settled a few days ago." It is highly probable that in the next few days, the general staffs in Rabat and Madrid will jointly announce the start of these maneuvers in an official statement.

Atlas 86 follows other naval air maneuvers in the Strait of Gibraltar area, which ended on 4 June. Units from eight countries of the Atlantic Alliance (the United States, Canada, United Kingdom, Federal Republic of Germany, Italy, Holland, Portugal, and France) took part in these maneuvers.

Strangely, neither of the two countries which actually exercises sovereignty over the waters of the Strait (Morocco and Spain) participated in those exercises. It seems particularly odd that Spain, a member of the Atlantic Alliance, did not participate.

These maneuvers were named "Open Gate." Their objective was the same as those which are to begin shortly in Spanish and Moroccan airspace: the defense of the Strait of Gibraltar from a hypothetical enemy proceeding from the eastern Mediterranean. According to the Moroccan communists—the only political group in Morocco which protested these exercises—this hypothetical enemy is no other than the Libyan regime of Col Mu'ammar al-Qadhdhafi.

The Moroccan communists of the PPS [Party for Progress and Socialism] severely condemned the holding of these maneuvers and urged the government not to remain passive and insensitive "before such a demonstration of force." This political group (which has two deputies) is the only one that has also questioned the holding of the annual military air maneuvers in the Strait by Spain and Morocco.

Military Collaboration

For the rest of this year the military collaboration between Spain and Morocco, with the exception of the scheduled air exercises, has focussed on naval maneuvers.

After several troop landing exercises conducted both in Spanish territory (Sierra del Rutin, in Cadiz) and Moroccan territory (Alhucemas), in which Spanish and Moroccan marines both took part, this cooperation has included joint naval maneuvers in April in the waters off Casablanca and Agadir, in which several Spanish ships took part, including corvettes of the "Descubierta" class, of which the Moroccan Royal Navy has one.

76,79

CSO; 3548/65

MILITARY

NAVY TAKES DELIVERY OF SPANISH PLANE, TO HAVE ASW MISSION

Stockholm DAGENS NYHETER in Swedish 4 Jul 86 p 6

[Article by Ingrid Hulthage: "The Navy's Latest Antisubmarine Weapon"]

[Text] The latest meteor in the Navy's antisubmarine sky landed yesterday at 1715 hours at Bromma Airport.

A two-engine monster--in military gray with a black nose--imported from Seville, Spain. Model: Casa 212.

Not very impressive as far as the exterior, but well suited for its purpose, it is said:

"A small Hercules," says pilot Rolf Carlsson, test pilot from Linkoping, who applauds the newcomer. The first specimen in Sweden.

The model has been in use since 1971 and is distributed across large parts of the world--in South America, among other places. In civilian life it is used as a transport aircraft.

"This particular one is slightly used and a test aircraft," explains Peter Norberg, chief of the Navy Testing Command.

Up to now the Navy has used Cessna 404, a smaller aircraft model, for submarine reconnaissance.

Room for Everything

"In the new plane we will have room for all the equipment we need: sonobuoy system, radar and infrared cameras—heat cameras," Peter Norberg explains.

The previous model only had space for one system at a time.

This summer Casa 212 will be used for training flights; 13 pilots will be trained into full-fledged ASW patrollers.



It is not exactly a beauty, the Spanish-made turboprop plane Casa 212, which landed yesterday at Bromma Airport to the Navy's great delight. The aircraft will primarily be used for testing reconnaissance materials but perhaps also for actual antisubmarine warfare.

The ASW equipment, among other things a new super-radar, will then be installed in mid-August.

"The plane will be fully equipped and ready to be taken into operation some time in mid-October."

At the end of summer--in August--another two will land at the Coast Guard.

"We might import one more," says Peter Norberg.

On the positive side of the Casa is, for instance, that the plane can land on a very short runway, only 280 m long. The plane is therefore capable of landing at small airfields such as Vastervik (with an 800-meter landing strip).

The Cessna 404 needs one that is four times longer.

Furthermore, the Casa 212 has extremely good low-speed properties, but it can also fly relatively fast.

It has a sturdy, strong construction with reliable U. S. engines. It is capable of staying in the air longer—up to 6 or 7 hours.

11949

CSO: 3650/264

MILITARY

FIXED ARMAMENT DEVELOPMENTS IN COASTAL ARTILLERY REPORTED

Stockholm TIDSKRIFT FOR KUSTARTILLERIET in Swedish No 1, 86 pp 25-56

[Article by Captain Bengt Hertzberg: "The Coast Artillery's Fixed Artilley Against Naval Targets--Present Situation and Development"]

[Text] Col Bengt Hertzberg has previously occupied himself with weapons development at FMV [Defense Materiel Agency] and has been a teacher of weapons technology at MHS [Armed Forces Staff College] and the head of an ordnance depot at SK [Stockholm Coast Artillery Defense]. He is now head of the Naval Officers Academy.

The following article was previously published as the annual report of the Royal Society of Naval Sciences in the scientific branch of Hand weapons, Artillery and Missile Technology. TIDSKRIFT FOR KUSTARTILLERIET has obtained the Society of Naval Sciences' permission for publication, since the article represents an excellent summary of the present situation in and the development of our fixed artillery unit.

Introduction

The choice of subject was made against the following background:

- --The immediately preceding annual reports dealt with torpedo, missile and mine weapons. It is therefore natural to deal with the artillery systems.
- --Naval targets were chosen primarily because an interesting development can be expected in this area. Some side remarks will be made regarding ground targets and aerial targets, however.
- --The limitation to the Coast Artillery was made because the artillery in our Navy has chiefly been reduced to essential but yet limited functions for deployment against aerial targets.
- --The annual report essentially deals with fixed artillery, although a large part of the weapons technology is in common with that of mobile units as well, of course. KARIN, that is to say the Coast Artillery's new mobile

artillery batteries with the 12-cm m/80 gun has, as has the discontinued gun Haubits-77, been reported on in a number of articles in recent years.

In the annual report I first discuss guns and ammunition. Their potential performance characteristics then present range requirements, requirements for accuracy etc. from an artillery point of view for reconnaissance-tactical control and fire control, among other things.

The important function which the weapons effect calculations represent is dealt with separately.

Fach part of the artillery system, such as the guns, is described as regards the present situation and the development which can be anticipated.

After these materiel descriptions, there is a brief analysis of the requirements for future artillery systems and the possibilities of achieving them. Finally, there is an outline of what two different types of fixed artillery batteries might look like in the year 2000.

The foundation for the annual report, besides my own thoughts, was taken from both secret and open literature, as well as through personal contacts primarily at the FMV. The article was cleared by the naval officers who serve at the FMV and who are listed in the source list at the end of the article.

Guns

Today's Materiel

Of the guns that are listed in the table below, guns of the smaller calibers will be retained in the short run, and 7.5 and 12-cm guns in the long run.

The remaining 15.2 cm are from varying model years and the majority have case sealss with a wedge construction. Batteries with these guns are now undergoing a life-extension modification, which, however, primarily applies to the fire control and communications materiel, while contributions to the gun side are limited. The gun modifications are primarily aimed at increasing availability and facilitating the handling of ammunition.

In addition, modifications for the new fire control systems are needed for the guidance and control equipment. The $10.5~\rm cm$ batteries are also undergoing these material modifications.

There are plans for the 15.2 cm batteries to remain in the wartime organization for another 10 years, approximately, in order then to be replaced, at least as far as the gun materiel is concerned, with a new heavy coastal artillery gun.

What should a new heavy coastal artillery gun look like? I will also include my thoughts on such a gun.

Analysis of Shortcomings and Potential Development

In the following I will touch on what might need to happen to existing guns. These have a very long lifetime, and it is judged that with successive modifications primarily the 7.5 and 12 cm guns could be used far into the 2000's.

The range of variation is great for both calibers and age in today's materiel. Nevertheless, I intend to simultaneously and by parameters try to analyze the shortcomings of today's gun materiel, what modifications are suitable and the development of a new gun.

| No of batteries in wartime org. Model year | Range (max) & actual | Elev. | Rate of Fire rounds/min | Veloc. m/s | Aim. | Steer. |
|--|---|---|--|--|---|--|
| 30, m/57 | (12,500) | -3- | 25 | 850 | Man | Rem. |
| 3 m/50 | • | | 25 | 850 | Auto | Rem. |
| J, 111/ 30 | | +70 | 3.7 | 0.70 | AULO | Kem. |
| 6, m/70 | (27,000) | -5- +50 | 25 | 880 | Auto | Rem. |
| | (21,000) 18,000 | -5- +45 | 4-8 | 825 | Man | Rem. |
| | in wartime org. Model year 30, m/57 3, m/50 | in wartime org. (max) & actual 30, m/57 (12,500) 10,000 3, m/50 (21,000) 18,500 6, m/70 (27,000) 23,000 g 9, 40's (21,000) | in wartime org. (max) & actual 30, m/57 | in wartime org. (max) & rounds/min 30, m/57 (12,500) -3- 25 10,000 +20 3, m/50 (21,000) -5- 35 18,500 +70 6, m/70 (27,000) -5- 25 23,000 +50 g 9, 40's (21,000) -5- 4-8 | in wartime org. (max) & rounds/min m/s Model year actual 30, m/57 (12,500) -3- 25 850 | in wartime org. (max) & rounds/min m/s Model year actual 30, m/57 (12,500) -3- 25 850 Man 10,000 +20 3, m/50 (21,000) -5- 35 850 Auto 18,500 +70 6, m/70 (27,000) -5- 25 880 Auto 23,000 +50 g 9, 40's (21,000) -5- 4-8 825 Man |

Range

Gun range is determined by the construction of both the gun and the ammunition. I will therefore return to this parameter in the chapter on ammunition.

From a purely theoretical gunnery viewpoint "only" two conditions need be present in order to obtain long range: high muzzle velocity, Vo, and a suitable, meaning more than 40 degree, elevation. In practice, however, it is also necessary to take into consideration for gun construction that it must be possible to handle a sufficiently long cartridge near and in the gun. In particular the projectile must be long (slender) in order to have a long range. A long projectile need not necessarily result in a long cartridge, however. The base cone and some of the web could be fit into the casing.

Thus, the Vo must be as high as possible. In practice this means an effort to achieve more than 900 m/s and preferably 1,000 m/s. For a high Vo a large quantity of very high-energy powder is needed. This involves two disadvantages from the viewpoint of construction:

-The internal ballistic maximum pressure increases and with that the requirements for strong and heavy construction of breech and barrel.

-The high-energy gunpowder produces high temperatures and high barrel wear. This can be counteracted by antiwear agents, but not without disadvantages. There is also a certain state of opposition between various kinds of gunpowder; granular powder, for example, means low barrel wear, while powder rods yield the lowest Vo spread. It is also possible to increase barrel length in order to increase the Vo. This as well gives a heavier barrel, however. The advantage of increasing barrel length is that a certain Vo can be achieved with less progressive powder.

The possibility of shooting with high elevation gives a more complicated gun. For older guns with manual ramming and heavier calibers it was often necessary to dump the gun to a loading position near O degrees. With modern automatic guns this is not necessary, but, as was mentioned, this results in a more complicated construction.

With a gun that can be elevated high it also becomes more difficult to protect the internal parts of the gun such as the operating crew against the high pressure which can enter more easily by the seal between barrel and gun dome. For this reason, among others, the 7.5 cm m/57 gun elevation has been limited to 20° .

The handling of long cartridges results in larger dimensions and a more complicated construction for ammunition stores, loading tables, elevator and ramming equipment. It is therefore desirable with respect to the gun to keep the cartridge length short. Modern ammunition such as the PROBOS type achieves its range through a high slenderness ratio in the projectile and thus a long cartridge.

For today's guns, which we are keeping for a long time, only limited measures can be undertaken to increase the range:

- --For the 7.5 cm gun it should be possible to achieve a range increase of 10-15 percent with modern ammunition. Increasing the elevation to 30°, for example, would have yielded a good result. But it would have been very expensive.
- --The 10.5 and 12 cm guns already have a good range today. Here as well a 10-20 percent range increase could be achieved with modern ammunition.

From what has been said about the requirements for guns in order to result in long range, we can thus summarize how a new Coast Artillery gun should be constructed:

- --Possibility of giving the projectile a muzzle velocity preferably up to 1,000 m/s (better ammunition).
- --Capability of being elevated to at least 40° .
- -- Capability of handling long cartridges.

Accuracy

By accuracy I here mean everything that affects the fact that the projectile actually hits where it is calculated to. On the part of the gun, the problem is restricted to three values: exact lateral and vertical aim and exact Vo.

Regarding lateral and vertical aim, today's materiel has acceptable accuracy for sighting instruments and mechanical transmission (play). What can be done is yet another improvement in the 7.5 and 10.5 guns in these respects. As for aiming the gun, modern technology enables a considerable improvement up to a factor of 4-5. Modern hydraulic motors and valves in combination with electronics allow for dispersion down to 0.2 mrad from the boresight. For 7.5 cm batteries, in particular the older ones, a changeover to zero-indicating or, better yet, remote aiming, can provide clear improvement. Remote aiming, that is to say without a manual link for aiming the gun, is essential in new construction also because it provides better aiming accuracy.

The longitudinal dispersion, of course, depends partly on the external ballistic construction of the ammunition, wind effects etc. However, the Vodispersion is more important factor.

It is therefore important to measure this dispersion (variation) and correct for it in the external ballistic calculations. Today, Haubits-77 has a Doppler-type Vo meter which allows for a measurement accuracy of 1 m/s. Such a device should be found on each coastal artillery gun, and its value is recoupled "online" to the external ballistic calculations of the gun computer. Expensive, but undoubtedly cost-effective in combat. Today's, and even more tomorrow's, ammunition is very expensive.

Rate of Fire

The rate of fire for today's 7.5, 10.5 and 12 cm guns is very high, undoubtedly sufficiently high and perhaps too high. Too high not from the aspect that potential continuing firing should be determined according to measured effect, but because a high rate of fire results in a complicated gun and high barrel wear. The gun should therefore not have a rate of fire greater than that the targets to be attacked during one engagement period can be attacked. The materiel of today thus does not need modification in any respect other than that the handling of ammunition and the equipment for that should be improved. But that is rather a question of fire endurance.

In new construction the need for rate of fire is coupled to the caliber, that is to say, the anticipated effect of the individual shot. For heavy artillery is 10-15 shot rate of fire should be sufficient.

It is possible to couple the rate of fire with the ability rapidly to change ammunition type. With today's system, in a combat situation one shoots what is in elevators and in loading position.

The need for changing the type of ammunition without shooting out will increase for two reasons:

- --Increasingly more types of ammunition are coming: Today there is normally only an antiship round and an explosive round. Tomorrow perhaps there will be some other form of target-seeking projectile, flare round and ground combat round, despite the possibility of a fixed projectile.
- --This ammunition has high performance characteristics, is expensive and the ammunition consumption limited.

In order to cope with this problem it is thus necessary to have a system of stores, loading tables, elevators and for example a loading pendulum which can reverse. Today's guns are not likely to be convertible according to this principle without very high costs. In new construction, several potential solutions exist. An automatically loaded gun with a single-step elevator and with partly manual ammunition handling in the magazine may be a technical and economically feasible solution.

Fire Endurance

We can demand of the gun that it should have such fire endurance that for instance all the antiship ammunition which is in the magazine can be shot in one engagement—over perhaps I hour. The foremost tasks of the artillery batteries of fixed barrage battalions are to defend against invasion which might require the fire endurance described above.

What is decisive for it? Basically, there is a general requirement that the gun should function for a long time under intense fire. Our guns today have such a quality, which is a form of availability.

Further, it is necessary for the entire handling of the ammunition to be arranged so that the demand for fire endurance can be met. Ammunition stores, elevators, etc. must therefore meet these demands. For the 7.5 and 10.5 cm batteries this handling can be technically improved, while this function is good for the 12 cm batteries.

The first thoughts of the artilleryman in connection with fire endurance with perhaps be the wear of the barrel and its grooves and bolts which is the result of intense firing. Finding suitable types of powder, other designs of ammunition and constructing the gun in order to cope with this problem is a job characterized by compromises between various requirements and possibilities. High muzzle velocity, VO, is needed in order to achieve long range, as was mentioned before. High-energy powder is required for this and as a result it causes a lot of wear. This can be counteracted through antiwear agents, which have the disadvantage, however, of sometimes leaving unburned powder residue, unsuitable in an automatically loaded gun.

A gun barrel must be cooled during firing in order that there will not be excessive wear. In simple form, this takes place just by making the barrel material so thick that it can store the excess heat. This is how the 12/80 gun is designed, for example. If a high rate of power with a high Vo is required over a long period, the only solution is to cool the barrel with a special cooling system. The cooling fluid is then pumped around for instance between the liner and the barrel casting. Large amounts are needed for this. For the 12/70 gun, for example, the coolant tank holds many cubic meters.

Of today's materiel, it is actually only the 7.5 cm gun which could need better cooling. The problem is not a major one today with suitable firing tactics. This is only a limitation when the gun is to be supplied with longer-range ammunition.

In new construction, particularly of a heavy gun, it is possible that the demands for rate of fire and Vo could be kept so low that a system for barrel cooling can be avoided. Such a system undoubtedly makes the gun heavier and more complicated.

Protection

The gun can be protected against weapons effects in several ways:

-Camouflage in order to prevent or obstruct detection,

its own antiaircraft protection against enemy weapons platforms,

-- construction in order better to tolerate weapons effects.

In this section I intend to discuss only the last aspect. Yes, whether the weapons are nuclear or conventional ones such as bombs, rockets or missiles, the effect could be direct hits, fragments, air pressure wave or ground pressure wave. With nuclear weapons, the effects can be very great at close range, and even the very high temperatures and the radiation can result in damages.

Then how should the gun be designed in order to cope with these damaging effects? Against a direct hit by a locket or against fragments, the first construction requirement is that the impact area should be as small as possible. What must inevitably be exposed should be protected. Long the most common protection has been armor, that is to say thick, alloyed steel, tempered in various ways. Such protection is normally sufficient against fragments. Against a direct hit and above all with RSV [not further identified] ammunition, there will be need for very thick, and consequently heavy, armored protection.

Modern technology for reducing these dimensions and weights has been developed, and can be manufactured within the country:

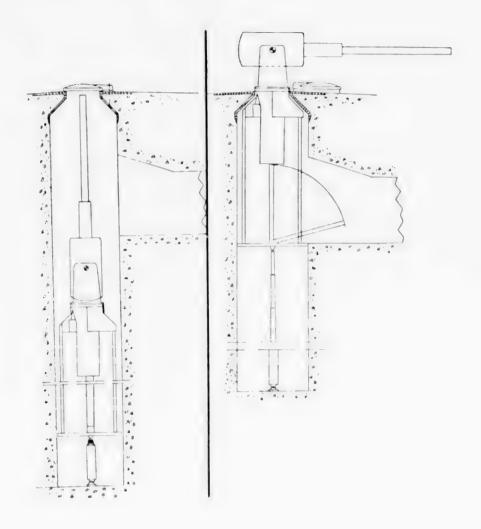


Fig. 1. At left the gun is shown in protected position under an armored hatch. At right the gun has been brought up into a firing position.

- --Dynamic armor consisting of an explosive between two thin metal plates. This explosive detonates during an RSV strike and breaks the aimed jet from the RSV weapon.
- --Composite armor consisting, as its name indicates, of several components, normally armored sheetmetal and some ceramic material. The durability can be increased or, if desired, the thickness can be reduced by a factor of two to four in comparison with ordinary armor.

In a nuclear explosion, as well as during direct hits or a near miss by heavy conventional weapons, the air pressure wave and the ground pressure wave can become considerable. Guns are best protected against the air pressure wave through a rounded above-ground shape and a well-anchored suspension with resistant ball bearings and a well-dimensioned spring unit. These

constructions to some extent also protect the upper portions of the gun against the ground pressure wave. For the lower spaces of the gun, protected by rock or concrete, there are various construction principles such as counter-casting in the rock or placement on heavy rubber springs. Fortifications Administration experts are likely to be quite advanced internationally in this technology.

Nuclear weapons have an effect which can result in very great damage even to fixed artillery batteries by the electromagnetic pulse, EMP. The reason it is so serious is because the effect of an explosion can be so geographically dispersed, perhaps hundreds of kilometers from the point of explosion. The effect is simply that all unprotected (tele-) technical material built with modern semiconductor technology can be knocked out.

The technology for protection has been well developed in the country, the capability of rapidly separating the built-in equipment from the outside world and screening through the "Faraday cage" principle. The problem is that this protection is expensive.

How should a new heavy gun be constructed in order to have good protection and still be economically feasible? The experience from the 12/70 expansions say that it should be possible to achieve just as high or even a higher level of protection if the performance of the gun is limited to some degree. In particular the requirements for large spaces under the gun and the high rate of fire are questioned. Large spaces and the need for protection for complicated material result in high costs.

Some principles to be taken into account in construction are the following:

- --A suspension that can stand up to the ground tremors is necessary. Robust gun construction is to be preferred.
- --The target surface which is not protected by rock or concrete should be small.
- -- The gun must be protected against EMP.

At the request of the Defense Materiel Agency, Bofors has developed a number of alternatives for heavy gun development.

- -A totally emerging gun with a very limited target surface in the protected position, then protected by an armored hatch (see Fig. 1).
- -Conventional gun of type 12/70 but simpler.

-Combined alternative with a gun that is raised about a meter during firing and in between is protected in a shaft and by a trench for the barrel (see Fig. 3).

Electromagnetic Cannon (Electrical Gun)

The rear-loading cannon was generally developed around 1850. Afterwards, the development progressed very rapidly regarding anti-ship guns. Except for some portion of the protective level and the rate of fire, the m/98B turret gun is a good gun even today. The development has continued during the 1900's but without major steps. Perhaps a totally new cannon principle is needed for that.

Such a cannon is undoubtedly the electrical gun. In Sweden there is not yet even one for study, but the Defense Materiel Agency has thoughts of such a gun with industry. In the United States the principle has been under study for a number of years, and has now reached the level of laboratory installations.

Theoretically, projectile speed has no limitations below the speed of light. In practice, speeds of 4,200 m/s with a projectile of not quite half a kilo have been reached today. It will certainly be possible to use projectile weights of up to 50 kg with calibers which at present are used for naval front guns up to about 25 cm.

The energy requirement varies quite considerably with the mass which is to be accelerated. For example, 1.35 MJ are needed to accelerate 0.3 kg to 3,000 m/s and 30 GJ for giving 1,000 kg a speed of 2,000 m/s. The times of discharge also vary from fractions of a second to several seconds for large masses.

In a gun it must be possible to

- --store a large amount of energy for a short time
- --be able to discharge a great deal of energy during a short time and under complete control.

With today's technology this should result in installations with large volume and rigorous security regulations. In the long run this might still be that major step for the artillery development. The very high muzzle velocities which are possible can also, in addition to long range, give extremely brief firing times for instance for antiaircraft or antitank guns. Or, in order to carry the naval target idea to its end, anti-ship guns for direct-aimed fire even at greater firing ranges.

Ammunition

Foundations for Naval Ammunition Development

The development of ammunition, and I refer primarily to the naval side, has been in a very expansive phase for the last 15 years.

The foundation for this is largely the so-called TORHAMNS method. This is a computer-based external ballistic calculation program, which was developed as early as the 1960's by the FMV-M's ammunition section, with section chief Nils

Bartelson as coordinator. The major advantage of the method is that an entire calibration of a firing schedule can be limited to 5 shots and provide an accurate result. Briefly, the method is based on the fact that the position of the projectile (retardation) is measured directly after the shot has left the muzzle. After computer-aided calculation, the air resistance coefficient Cp of the projectile, among other things, and its variations can be determined. With previous manual calculation methods perhaps 100 shots had to be fired for the same, or rather for acceptable, information, followed by extensive calculations.

It is obvious that with such an external ballistic instrument of calculation it was possible to speed up development. This applied primarily to tests of increases in range and accuracy, but projectile design for maximum effect has also been the object of extensive development.

These three parameters, range, accuracy and effect, are what I now intend to discuss in turn, and in so doing describe the present situation and various possibilities for further development. The fixed guns of today have a long lifetime and are therefore a legacy which we must take into consideration for a long time to come. Consequently, I will also illuminate the modification or partial new development which could be of interest for today's guns of various calibers.

Development Potential

Range

There are three possibilities as regards ammunition for achieving long range.

--high muzzle velocity, Vo,

--additional speed in the trajectory

-- reduction of air resistance.

A large amount of high-energy, suitably designed powder is needed for high Vo. Previously, one was limited to using various types of powder based on nitroglycerine. Today, there are powder types of nitramine type (plastic bonded explosive), which for instance can increase muzzle velocity by a limited number of calories. The Vo should, if possible, reach about 1,000 m/s, as was mentioned earlier, at least with some part of the ammunition equipment for naval front guns.

By the addition of speed to the trajectory I mean so-called rocket-assisted projectiles [RAP], that is to say ammunition in which the projectile is equipped with a rocket engine which burns for part of the time of flight. The advantage of RAP is that it is possible to achieve considerable range, in the magnitude of 50 kilometers with 12-15 cm caliber and a powder-based engine. With a ram-jet, ranges of 80 kilometers can be reached. The disadvantages are often the great (longitudinal) dispersion and limitations in the explosive weight of the warhead. These disadvantages are predominant for antiship ammunition, and no development is being considered at the present time.

Reduction of the air resistance of a projectile can be accomplished by various methods. In general can be said that a projectile should be slender, that is to say have a small diameter in relation to length. The tip should be extended and preferably reach all the way to the rear face. The problem with such a projectile is that it is not stable in the trajectory unless the rotation has a short "web" for guidance in the grooves of the tube so it will not oscillate. The web can be provided with a support ring, which makes the ammunition more complicated, however. In other words, there is room for compromise in the construction.

Such compromises between the various parameters involved have been included, as far as antiship ammunition, in a system called PROBOS. This is a computer-based program system for ballistics and effect, which was developed over 10 years ago by the FMV-M in cooperation with the Defense Research Institute [FOA].

With PROBOS, an optimization for range can be done, that is to say low C_D , taking into account not only stability in the trajectory but effect and, to some extent, precision. The program therefore gives configuration and mass distribution.

Approximately half of the entire air resistance is so-called base resistance, meaning the "suction" or vacuum created at the rear face of the projectile. In order to reduce it, the projectile can be provided with a base bleed pipe, which burns for a large part of the time of flight. This reduces or even eliminates base resistance and range increases of 20-40 percent can be achieved. Base bleed ammunition exists today, or has been planned for procurement, for all our fixed batteries.

A reduction of air resistance and greater Vo which yield an increase in range can also take place by subcalibering the projectile. This means that it has smaller diameter than the barrel and is sealed against the latter through a guide bushing, rotating band and seal ring. A subcaliber projectile could be fin-stabilized. The disadvantage which makes development for antiship use less interesting is the same as for the RAP: the potential "useful" payload is small.

Accuracy

Some of the dispersion in the target area which is always connected with artillery firing with multiple shots is due to variations in the atmosphere. This portion can be more or less carefully calculated but is difficult to compensate for entirely. The remainder of the dispersion depends on variations between the different projectiles and their booster charges.

The muzzle velocity, Vo, varies for different projectiles during a firing. Just how large the dispersion is depends largely on the powder in the booster charge and its ignition process. With suitable design and composition of the powder, such as nitroamine powder in rods, it is possible to achieve Vo variations in the majority of the shots in the 1 m/s range. As was pointed

out earlier, there is often a state of opposition between precision and range requirements. Increased safety also demands new types of powder. The United tates, for example, has imposed strict requirements in this respect.

Mase bleed projectiles were mentioned earlier with regard to increase in range. But base bleed also provides less dispersion, not only longitudinally, is might perhaps be natural, but laterally as well. The reduction in dispersion can amount to about 50 percent in comparison with other projectiles. Roughly, for modern heavy shells with long range and base bleed, it is possible to estimate the dispersion for 30 km to be the same as for older "conventional" projectiles for 20 km.

Dase bleed it is thus possible to reduce the dispersion to an acceptable level oven for relatively large firing ranges. If the dispersion is still too great and the current target type has to be fought with artillery at great distance, the projectile must be guided in some fashion toward the target in the forminal phase. In this context it is common to distinguish between somalled terminal-phase guidance and terminal-phase correction. With the former technique the projectile is continuously guided by some type of target-seeker toward the target during the last few hundred meters. With the simpler terminal-phase correction, the direction of the projectile is influenced one or a few times.

Perminal-phase guided or terminal phase-corrected grenades are today available internationally finished or at various stages of development. They have in common that the development and the shells are expensive and that the guidance equipment including fins or impulse generators use up weight and room taken from the warhead-explosive charge. The development has gone furthest for prenade-launcher ammunition. Such terminally-guided ammunition is available exerctionally today at units abroad.

bridges in this field have been under way in Sweden for about 10 years, primarily at the Defense Research Institute. The study situation for these possible of the projectiles, SLUFA, have been reported in MARINNYTT, No 1/83, among other places. Two working names for such terminal phase-guided projectiles are KARON and BASTA. KARON is intended to be fin-stabilized after the peak of the trajectory as well as target-seeker guided, while BASTA is command-guided with guidance information from the firing site. Target-seekers in the mm-wavelength region are also being studied in this context in Sweden.

The levelopment costs for the here briefly described guided ammunition will be high, higher than what was originally estimated. There must be constant consideration of whether the development is cost-effective. An interesting alternative for naval targets which is less complicated and therefore cheaper has the working name BROMSA. It is based on the principles of reducing longitudinal dispersion by moving the mean impact point beyond the target and then just before the target drastically increasing the air resistance of the projectile $(C_{\rm D})$.

The more complicated the ammunition is, and terminally guided ammunition is undoubtedly complicated, the more expensive it becomes and with it follow tangible economic limitations regarding procurement of ammunition. What might be cost-effective is to acquire some expensive, complicated ammunition for the long firing ranges which could become necessary. A large part of ammunition research in the future as well is likely to consist of simpler ammunition for short and intermediate combat ranges.

Weapons Effect

In the section of accuracy it was shown how using modern ammunition we can hit the target, that is to say the "classic" probable accuracy of hits. This part of the calculation, although complicated, has been well known for a long time and presented in firing tables. But then what happens? Does it detonate, and where? What is the effect of fragmentation, pressure and potential fire?

The answer to these questions can only be gotten through extensive weapons effect tests and subsequent calculation work. The most accurate results are of course obtained in full-scale tests against ships similar to actual target types. But such tests are necessarily difficult to undertake for practical and economic reasons. In recent years several test detonations of antiship projectiles have taken place against scrapped ships. Furthermore, a number of tests were carried out under FMV and FOA direction at the Torhamn firing range in order to obtain better insight into the three areas I intend to discuss:

- --hit-penetration
- --fragmentation effect
- --blast effect.

Earlier (1960's, 70's) weapons effect calculations for antiship ammunition against "hard" targets, principally certain types of landing craft, showed up the need for great firepower. The reason for this was among other things the high percentage of glancing shots. Antiship ammunition is supposed to penetrate the target and detonate after a number of meters.

More recent tests show that penetration takes place even with quite oblique impacts and through several plates lined up one after the other. Some of the "hard" targets become hard precisely by using thick edges for protection.

After penetration, the warhead is to detonate. The tests have also provided the most suitable number of milliseconds from impact when this is to happen. Base fuzes or central fuzes are suitable for antiship grenades.

Fragmentation effects for ship targets have long been well mapped out (FOA, FMV-M). Here, the development has mainly been aimed at appropriate fragment size and distribution. Prefragmentation is also suitable against ship targets. It is likely that a higher fragmentation effect could be achieved with a new type of detonator.

The explosive weight has increased considerably during the ammunition development that has taken place. A light antitank shell from the 1940's contained perhaps 2 percent explosive, while the cooresponding amount in a modern PROBOS shell is about 10 percent. This has resulted in the blast effect becoming increasingly interesting. Tests have shown that modern antiship ammunition, particularly heavy such ammunition, with a certain addition of aluminum in the explosive, has considerable blast effect. This could become decisive even for relatively large impact volumes—ships.

The effects of a modern antiship projectile described here: accurate penetration and detonation, high fragmentation as well as blast effects, gives rise to the thought: Do we need both antiship rounds and explosive rounds against ground targets? It ought to be entirely feasible technically to construct a general target projectile with different fuze alternatives for the heavy guns of the Coast Artillery. Economically, this may be more doubtful. Antiship ammunition is clearly more expensive than for example ground target ammunition need be.

Ammunition for Today's Guns

The lifetime of the fixed coast artillery antiship guns is perhaps an average of 50 years. It is therefore quite natural that other parts of the batteries in which the guns are included should be modified periodically, primarily with new tele-technical material and ammunition. The guns of today will be utilized from perhaps another 10-15 years (15.2 cm battery of older model) until far into the 2000's. Actually, none of these fixed batteries has the most modern antiship ammunition. Therefore this presents a possibility clearly to raise the effect in a cost-effective manner; good ammunition has already been developed.

Caliber development of PROBOS ammunition is essential for all the gun types. Such ammunition provides both good range, precision and weapons effect. The projectile should preferably have base bleed. The limitations are set by the magazine arrangements, elevators, etc. of the guns, but the development is possible and necessary.

The 12/70 batteries are intended to be the heavy clubs of the defense against invasion for a long time. In order to utilize the long ranges made possible by modern ammunition, a part of the equipment should be "guided" ammunition. The economy is likely to limit us from choosing "the best." Some form of terminal phase correction is judged to be combat-economic.

For economic reasons, older ammunition, such as ground target ammunition, must be used in the future as well. We make this possible by replacing parts with less good function or with limited lifetime. Examples of such parts are fuzes and booster charges.

New manufacture of practice ammunition is expensive, in the 50-20 thousand kronor-range for a 12 cm cartridge. Older ammunition is often sufficient. An example of this is ammunition from the 12 cm guns of the soon-to-be-retired

destroyers. A great deal of such ammunition has been fired with fully satisfactory practice results from 12/70 batteries.

Fire Control

Definition--Today's Materiel

The duty of the fire control platoon at a heavy battery is largely the same as 25 years ago.

- --finding the range to the target, meaning obtain measurement data,
- --calculating firing data in a calculator
- --delivering these to the guns.

Earlier, there was always a special measurement station, radar or optical, for range-finding. The calculations then took place in a central instrument, after which the firing data were transmitted, through reading or through a pointer indicator, to the guns.

Today, we call the equipment that carries out these functions a fire control system. Then, as regards equipment, it is more a question of placement just how combined the sensor and calculation part is, and many of the firing element calculations in modern fire control take place in a gun computer.

The fire control functions of today thus no longer include separate measurement stations and central instruments, at least not as separate as before. These older types of equipment have been retired in the last few years.

A short summary of today's antiship fire control for fixed batteries might be in order.

Briefly, the existing coast artillery fire control performance characteristics can be described as follows:

Range--Accuracy

The range of the radar measurement stations is, at least in an unjammed telecommunications environment, today completely determined by the radar horizon, that is, with normal site heights and against intermediate (medium high) targets it is 25-30 km.

The fire control systems which use optical sensors have a range of about 15 kilometers.

Accuracy is very good for both radar and electro-optic sensors and is quite sufficient for all combat targets, possibly with some hesitation regarding very rapid small targets measured by older fire control systems.

Antijamming Properties

The antijamming properties of the radar fire control systems vary according to their age. Newer measurement stations have very good security against telecommunications disturbances with frequency hop magnetrons. The older radar fire control systems have recently undergone a life-extension modernization, however, whose purpose was to increase the antijamming capability, among other things. The radar fire controls have the capability of passive tracking. Electro-optic measuring stations are difficult to jam.

Operational Reliability

The technological development for increasing operational reliability is at least as important as pure performance characteristics. Our newer fire control systems are constructed according to modern technical principles with modules, replaceable units and error alarms. Older types require more from the technicians. Operational reliability must, at least in view of how many years the older fire control systems have been in use, be described as good.

Protection

The sensor parts of our modern fire control systems are well protected through "armored cladding" or with masts that can be raised and lowered and armored hatches. For the oldest radar fire control systems endurance must be achieved through rapidly replaceable spares for the above-ground parts.

Other portions of the fire control systems, indicator rooms, etc. have the same high protective level as the batteries in general.

Table for Artillery Fire Control Systems against Ship Targets (ARTE)

| 150 | For battery | Technology | Notes |
|-----|-------------------------|---|--|
| 710 | Light batteries | Analog, radar, 50's technology | AML 701 Electro-opt. sensor also avail. |
| 710 | Heavy & light batteries | Analog, radar & electro-optic sensor, 60's technology | Digit. signal trans. |
| 724 | Heavy batteries | Digital, radar & electro-optics, 70's technology | |
| 728 | Heavy batteries | Digital, electro-optic sensor | Supplement to radar range-finding station(s) |

Development Opportunities--Radar Fire Control Systems

The radar is definitely the most all-round sensor for coastal artillery antiship fire control systems with all-weather capability and possibilities for working with multiple targets simultaneously. What development potential is there for the radar's most important performance characteristics?

Range--Accuracy

As was mentioned earlier, today the radar horizon limits the range, that is to say, it is normally not the performance of the station, but how high the antenna is located that determines range.

The ranges need to be increased for heavy artillery with respect to the ammunition development, and there are primarily three possibilities:

--Utilize other side-arrayed radar fire control for firing along the coast, ---placing the antenna in a fixed position but high up, i. e. a high array site or on a high mast,

-- some form of airborne, anchored unmanned platform of helicopter type (RPV).

It is likely that all of these possibilities need to be used, at least in the long run. In order to achieve the required ranges with heavy artillery and modern ammunition (not to mention a coastal missile), that is to say about 40 km, the antenna needs a height of about 60 meters.

Normally, we do not have coastal formations of this height, which is why raised platforms may become a necessary solution.

Measurement accuracy for modern radar stations is satisfactory, particularly if more advanced signal processing is used for the aim point calculations.

Antijamming Capability

Beyond additional refinement of the antijamming circuits which are part of our modern radar fire control systems, supported by computer, among other things, a development is likely to take place primarily through another type of signal processing and by using passive methods. Such range-finding is based on geographic separation of either a transmitter and one or several receivers or the combination of several different passive receivers. This requires extensive signal processing as well as an extended, secure (wire) signal network along the coast.

Operational Reliability

Using maintenance planning to analyze system structure and planning the maintenance service in order to achieve the highest possible economic availability, is certainly nothing new. However, techniques for this work

have been developed and are being implemented in cooperation between the FMV and the current (fire control system) supplier.

The following factors in our future fire control systmes, including electrooptic ones, should yield high availability.

- --- Automatic error alarms referring to a certain component or unit.
- --Replaceable units and spare parts in sufficient quantity.
- -Acquisition of these at an early stage for the entire life of the material and distributed to unit level and individual fire control unit.
- -- Technicians at unit level primarily in order to replace a faulty unit.

Technical training of operators will become necessary for maximum utilization of the materiel.

Protection

A radar fire control system has many advantages, but these are only gained at the cost of certain sacrifices. The stations are on a large scale regarding materiel and therefore expensive. Thus, they cannot be "protected" by being acquired in large numbers and spread across the surface, although decoy radar stations could have some of that effect. Our few radar fire control systems must therefore be protected with steel and concrete. The technology available loday, with above-ground parts that can be raised and folded as well as reserve antennas for raising after being knocked out, should therefore be utilized.

From the aspect of fortification, the material can be enclosed more simply (and cheaply) than for example the m/70 12-cm turnet battery.

Dimensions and weights for the above-ground materiel, i. e. antenna, turntable assembly etc. play a large role in this connection. X-band radar, in which full side-band measurement accuracy is obtained through the dimension of the antenna, results in a large antenna with accompanying large weights and volumes for the armor which is to provide protection.

Two possibilities exist for reducing these problems.

- --Ku-band radar normally has fully sufficient range but no more than half the dimensions for the above-ground material.
- --X-band radar with a smaller antene, but more highly developed signal processing for sufficiently large transverse measurement accuracy.

Another type of protection is the possibility of functioning in a passive mode. For this the totality of the measurement values from several stations are combined. The principles which are based on short- or long base-line will thus be used again. Passive range-finding applies especially to low-light situations, when it could be important not to transmit actively. Passive mode is also a type of protection against signal-seeking missiles.

Development Opportunities--Optronic Materiel

This wavelength region in practice extends from visible light just under 1 micron to the longer infrared region up to about 12 micron.

Even today's materiel has entirely sufficient measurement accuracy both transversely and, with laser rang-finding, longitudinally.

The development opportunities are probably in range, signal processing, weight and costs.

Within the region of visible light the technology can be based on gathering light, processing with signals and presenting to the operator. This can also take place with television or video amplifier techniques.

Laser technology can also utilize the visible frequency region, as well as the region just outside it.

In this context the ranges are limited by the atmospheric absorption, among other things. Daytime ranges of $20-25~\rm km$ could be achieved with good "electro-optic" visibility.

It is interesting that the advanced television and video amplifier technique is likely to provide ranges of about 15 km at night with good visibility.

The same range or perhaps yet another kilometer can be reached with advanced laser range finders. Another development in 10 years or so is the image-producing laser, which is also likely to have a range usable for artillery purposes.

One problem for long laser ranges is, however, that it is achieved through a very narrow laser beam. This imposes special demands for stability in the mount or, for longer ranges, the mast which supports the laser. Only about a hundredth of a degree deviation is tolerable.

Infrared technology, that is to say detection of the heat radiation emitted by all objects, such as ships, is also under development. In the longer wavelength range of 8-12 microns reasonable ranges can be achieved against ship targets. However, the ranges are not likely to be in the same class as for techniques at or near visible light.

Other Technology--Other Developments

In the somewhat longer run several other areas of frequency can conceivably be used for fire control purposes. Millimeter waves might combine the advantages of radar and optronics. One problem here is the strong atmospheric absorption, however.

Underwater technology is being intensely developed, above all in Sweden. Together with advanced analysis equipment, and potentially combined with surface reconnaissance means, both bottom sonar and terrestrial magnetism techniques might perhaps result in sufficient speed and accuracy.

Another type of development which will become necessary for economic reasons is simulator development. Such development is needed both for training for monitoring it and the materiel. Today's, or shall we say yesterday's artillery firings with long series and a great deal of ammunition, will become rarer due to the high costs. The greater demands for (peacetime) security and the increasingly heavier ship and boat traffic in our archipelagoes also argue in favor of greater use of simulators.

With the television image intensifier—or IR technology—which is coming, will we then completely get rid of combat illumination in artillery contexts?

Combat illumination is necessary at least for the next few years. In the longer run, however, it is not likely to be needed for range-finding but for identification. The technological development in this field has not been particularly active in recent decades, but with modern techniques good ranges and small materiel dimensions should be obtainable.

Tactical Control-Signals

A description of reconnaissance means, tactical control materiel and signals might fall outside at least the narrow framework for this article. At the same time the materiel for these functions is so important for the deployment of artillery against ship targets, that I will briefly discuss even these sections.

The reconnaissance material of today consists of radar (coast reconnaissance radar, turret radar and close-range radar stations) and optical-electro-optic stations are of varying modernity. The material is undergoing a continuous renewal, however. The new coast reconnaissance radar of type PS-870 which is being procured represents a welcome addition.

Within the fixed coastal artillery units there are completed exclusive wire signal networks. These are usually well protected. Their newness varies, however. Older wire signals with limitations as to capacity and availability and modern wire material are often mixed within the same geographic region.

A continued supplementation and modernization in order to reach a more network-shaped structure and higher availability is desirable. With such signals it is possible to meet the demands imposed by deployment of the artillery system of the future, namely to

--cope with being knocked out--enable circumventions,

enable fire control across a large surface and exchange between the fire control stations of different batteries.

--carry out the information transfer which our future tactical control system STRIKA demands for data interfacing and capacity.

The tactical control materiel we have today is largely manual plotting and tables. These do not meet the demands imposed by tomorrow's means of reconnaissance and weapons systems.

A new tactical control system for coast artillery, STRIKA, is now being introduced. A very brief presentation, seen primarily through the eyes of the artilleryman, follows:

Task

- --Rapid and secure exchange of information between naval tactical control centers. Joint situation picture.
- --Secure weapons deployment at the right time and with the intended effect. Continuous information.
- -- Assure coordination.

Installation at

- --brigade staff
- --battalion staff artillery batteries
- -- radar stations.

Functions

- -- Information gathering from radar, among other places.
- --Processing, for example target-tracking, identification and plotting.
- --Command, including among other areas shot case analysis, target indication and risk field estimate.
- -- Communication of target data and target register, among other things.

With STRIKA and other materiel development outlined here, the Coast Artillery will have the aid needed by battalion and battery commanders for deploying our modern artillery batteries against ship targets. The 12/70 batteries and future heavy antiship batteries have, or will have, such performance characteristics that many targets can be efficiently attacked in a short time and at long range. In the next section I will explain how important it is that the fire employment takes place in the right manner.

Calculation of Fire Employment

The increases in performance which are technically and economically reasonable for gun, ammunition and fire control systems are, as we have seen, often limited to improvements of 10--50 percent.

To fire at the "wrong" target or range--at the wrong time--in a combat situation could result in a several hundred percent waste of ammunition.

There ought to be tactical situation in which a large amount of ammunition must be shot at a certain target. But this should take place after calculation and evaluation of this sacrifice.

In TIS No 3, 1981 ("Fire Employment With Coastal Artillery Against Ship Targets") I discussed in more detail the opportunities for fire employment calculations today. However, the subject is, as I just mentioned, so decisive from the aspect of artillery and also so coupled to development of computer support for tactical and fire control systems, that I am giving a summary of the article below.

The purpose of a fire employment calculation in its purest form is to find out how many shots in the engagement need to be fired against a certain target at a certain range.

The reason for the fact that this contribution has to be determined in advance is principally that

- -- Range and sight conditions rarely allow for optical observation of results,
- -- the high rate of fire and large ammunitions effect of our modern batteries often cause the entire fire employment to be in the air before impact.

The difficulties of making these calculations are partly that they are complex, with a large number of parameters which can vary independently, and partly that certain input values are uncertain.

Both of these types of difficulties have, if not been removed, at least been reduced considerably over the last 10 years because

- --Weapons effect and penetration tests against various types of targets with antiship ammunition have led to more accurate calculation of the effects.
- --Development of practically usable computer-based methods for employment calculations (hit and effect probability) has taken place.
- --Development, partly with the help of the above, of effects tables for our most common artillery batteries against various types of ship targets has now been concluded.

The basic methodology for the calculations was done previously in cooperation between the FMV-M ammunition section and the Coast Artillery Gunnery School (KAS). The actual writing of the tables was done under the leadership of KAS.

In its simplest manual form, that is to say effects tables, the entry value is the number of shots in the effects fire.

The entry values are, according to the following:

Battery type--measurement method--target types--course angle--firing range.

For radar measurement methods there is a simple development: Effects discs directly on the plan-position indicator.

Some important entry values for the calculations are briefly described below:

Measurement Stations--Measurement Dispersion

For modern measurement stations with both radar and optronic sensors, measurement accuracy is good and measurement dispersion is limited and quite well known. Additional statistical calculation from firings can provide more accurate values. This is desirable in particular during jamming conditions.

Ballistic Dispersion

As was reported earlier under the heading of ammunition, modern firing tables, developed according to the "Torham method" for course calculations, are very reliable. The dispersions can be considerable for the long ranges which are now achievable, however.

Target Types

A limited number of target types covering everything from fast hovercraft to large displacement cargo ships have been constructed in stylized form by a number of "boxes." These types of targets, as well as all other entry values, can easily be changed if a revision is necessary.

Projectile Effect

Firing and detonation tests with both real targets and with large-scale constructed models have included both of the important parts:

- --penetration--glancing--detonation
- --total effect, meaning both fragmentation and blast effect.

In brief, the results of these effects tables, can, for reasons of secrecy, only be said to be:

- --Electro-optic measurement stations also give good results up to intermediate firing ranges.
- --Fire employment against "non-hard targets" is surprisingly low up to approx. 70 percent of maximum range.
- --Hard targets (landing craft) can be attacked at long firing ranges. Attacking at 50-70 percent range intervals reduces fire employment several times.
- --The firing regulations, which the Coast Artillery in principle has had since the modern radar fire control systems arrived, are good. It is now possible to calculate the length of the effect fire, and that should be exploited.

Development

Fire employment calculations are complex, require large amounts of data and should be able to answer various questions. The development of using computer support for this is therefore natural.

The answer provided by the fire employment calculations should be simple for a commander or officer directing fire at a measurement station:

At what range do I attack that target in order to be sure to stop it before that point with the least possible amount of ammunition? What is needed is thus the answer to an artillery-technical questions.

The question can be more involved to a battalion commander. What artillery batteries are to be deployed against what target groups and when? What is needed is thus computer support in order to be able to make a correct tactical evaluation.

The opportunity for making such an evaluation correctly, in which combat economy is weighed against the task, is so essential with growing ammunition costs that we cannot afford to do without a computed-based fire employment calculation.

Such equipment should be found at various levels. At the measurement stations it is probably best integrated into the fire control systems, at least for radar fire control systems. At the battery and battalion level a coupling to the STRIKA tactical control system is natural.

The duties of the effects tables, or of those included in ARTE or STRIKA, are to be used in war, until it turns out, perhaps, that they are not correct. If combat experience indicates that the duties need to be changed, this must be done for all units as soon as possible.

Future Artillery Batteries

In this section I want to give a brief analysis, or more appropriately some personal thoughts about

- --what does the threat picture look like against fixed artillery batteries in 10-20 years?
- --which of the possibilities presented to us by technology should we choose, against the background of duty, defense against invasion, this threat picture and our limited economy,
- --- what might two different types of units look like?

But first, why new fixed artillery batteries at all? The answer is foremost: protection and emergency preparedness. The effect becomes very great with the protection which can be made superior at fixed units. We must therefore have fixed units in areas where coastal artillery is always needed.

Yet another reason is that it could be difficult to move heavy mobile units out into the archipelago.

Threat Picture

- -- Very accurate intelligence is possible with satellites, among other things.
- --Sabotage units can damage primarily unprotected above-ground materiel in an introductory phase.
- -- Heavy airborne landing threats, above all by helicopter.
- -- Difficult telecommunications environment.
- --Precision-guided weapons with capability of knocking out point targets as well. RSV.
- --Surface-covering weapons, mine bombs-fragmentation bombs, are still in use.
- --Nuclear weapons for EMP effects (high-altitude detonations) are possible, although the weapons are not deployed against ground targets.

Technical-Organizational Formation

Level of Balance Technique

From the viewpoint of tactical economy, it is important to have a balance between the various parts of antiship batteries. It is therefore no use having large ranges of fire, unless the impacts can be measured and observed. The correct level means that we should not make use of everything technology can provide us with. With the 12/79 batteries we made use of a little too much. The result is first-class, but expensive. A somewhat lower rate of fire would probably have been sufficient, for example.

Range-Accuracy

The number of batteries which can be retained or newly built in our most important invasion defense regions will be limited for economic reasons. This argues for long range. Being able to fire along the coast, and in so doing dominating a long stretch of coast with one unit, is in general more important than shooting far out from the coast. In certain areas, such as where waters narrow down, the latter is also important. From the aspect of tactical economy, only a part of the ammunition should have long range.

Our modern artillery batteries have good precision. This can be retained in new construction without excessive cost. The great firing ranges, 30 km and more with heavy artillery, are likely to need some form of terminal phase correction. This is facilitated by large calibers, more precisely 15.2 or 15.5 cm.

When firing at great range along the coast, several fire control stations should be coupled together into one battery. This reduces the need for siting the range-finding stations high.

Weapons Effect

Today's PROBOS ammunition has very good weapons effect on the target types which are of interest to heavy artillery. This aspect, as well, argues in favor of large caliber. A large "payload" can then be contained, although part of the weight and volume are used for guidance equipment for precision. The blast effect can also become significant in a modern 15-cm antiship projectile.

The rate of fire may be limited: 12-15 shots per gun and minute are sufficient for heavy artillery with long range.

Protection

--Against reconnaissance: Essential are lightly camouflaged above-ground components.

--Against air, missile attacks: Elevating antennas and guns. As small unprotected above-ground components as possible. Armored hatches of composite materials. Antiship guns should not be used against air targets. General target guns are much too poorly protected. Special antiaircraft guns should be available.

--Against airborne landing: Suitable organization from the aspect of ground combat: Special ground combat ammunition for close combat (200 m?) should be acquired.

--Against nuclear weapons: Dimensioning both for ground shock effects and air pressure strain. EMP protection is important.

--BC protection (+ radiation protection), as today.

Organization--Grouping

The development is heading toward an increasingly integrated artillery system. Parts of the fire control systems are at the guns. Fire controls and tactical control components are combined in construction. This development is natural and should continue.

This also gives us the possibility of a number of reserve methods—redundant levels. The limits for this are set by our conscription system, in addition to the costs.

Technology also gives us the opportunity to supply each gun with a simple but complete fire control system, that is to say both measurement station and calculator. This should be utilized. There have been thoughts of separating the more complicated radar measurement stations from the batteries within a battalion region and from them creating fire control batteries. This should not take place. The battery is the combat unit which must be able to function autonomously from the aspect of artillery. On the other hand, a continued expansion of the signal network must be undertaken in order better to be able to use the measurement stations of adjacent batteries within and between battalions.

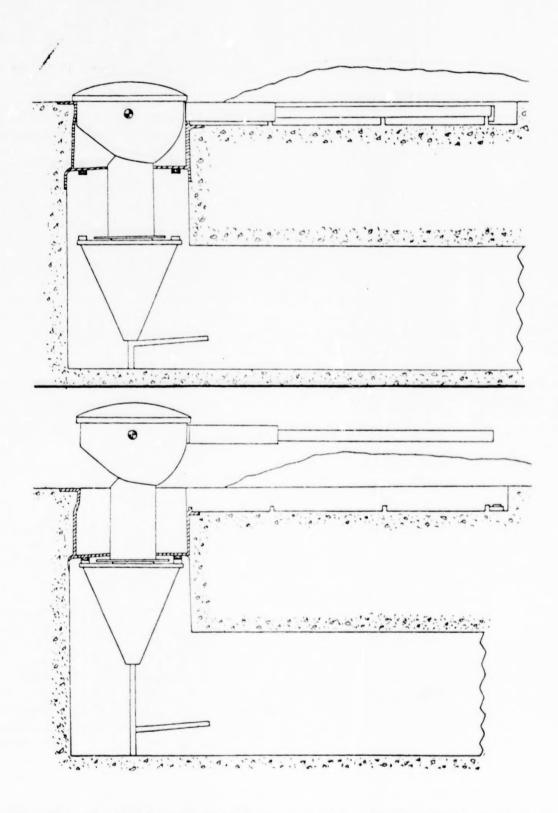


Fig. 3. The gun can be raised and lowered with a small target surface and requires no personnel in the gun turret.

How should a battery with for example a command site, four measurement stations, four guns, antiaircraft capability, grenade launchers and maintenance sections be grouped?

In view of nuclear weapons and airborne threats, the most dispersed grouping possible should be chosen within perhaps 3 x 3 km. From the aspect of ground combat, this results in a battery that is very difficult to defend, however. The solution might be to group a smaller number of units in groups and then have a relatively long distance, perhaps 1-2 km, between these groups.

Sketch of Two Fixed Batteries for the Year 2000

7.5 cm battery m/57-92

15.5 cm battery m/94

| Gun | 7.5 cm m/57 modified: | 15.5 cm turret gun m/94 (see fig.) |
|-----|---|---------------------------------------|
| | auto. align.; manual reserve in plan 2 | auto. align. manual reserve in plan 2 |
| | auto. charge; manual reserve | auto. charge; one-step elev. |
| | optronic fire control at the tracking telescope | built-in optronic fire control |

--protection: raised an lowered --protection: complete with composite armor in shaft, composite armor for above-ground components

-- rate of fire: 15 rounds per gun -- rate of fire: 20 rounds per and minute gun and minute

-- Vo measurement equipment coupled -- Vo measurement equipment coupled to gun computer to gun computer

PROBOS Vo 950 m/s, D = 13,500 m. Notes Sgr m/92: Vo 800, D = 11,000 m, early fragmentation, fuze: ZONAR

PROBOS Vo 970 m/s, D = 35,000Base bleed, 30 % or consumable: BROMSA. Sgr Vo 800, D = 23,000,

prefragmentation fuze: ZONAR.

Ground combat grenade for close combat.

2 optronic ARTE 728 mod. (video control amplification). Optional coupling system to nearby ARTE 724. Certain batteries ARTE 733 w/o mast.

1 ARTE 733. Ku-band radar with elevating antenna mast. 3 ARTE 728 mod.

Tacti- STRIKA cal command

STRIKA for priority batteries.

AA 4 25-mm AA cannon m/90. Certain batteries one AA turret with 4-6 25-mm AA cannon m/90. 40/48 (LvS 75M)

1/2 AA turret with 40/48.

The material for the annual report was taken from:

Written material:

- (1) Bofors report 1983-06-03: "Fordjupad studie fast KA 90" [In-Depth Study of Fixed Coast Artillery 90]
- (2) CM (SUR 4) Study project 2: AM 2000
- (3) SRA Report: STRIKA 85. Project specification. Part 2.
- (4) MARIN NYTT
- (5) TIKA

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